Employees' Retirement System of the State of Rhode Island

Pension Trust Funds of the State of Rhode Island

Comprehensive Annual Financial Report

FOR THE FISCAL YEAR ENDED JUNE 30, 2017

ERSRI

Employees' Retirement System of Rhode Island

2017 Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2017

Employees' Retirement System of Rhode Island

Employees' Retirement System (ERS)

Teachers' Survivors Benefits (TSB)

Municipal Employees' Retirement Benefits Trust (MERS)

State Police Retirement Benefits Trust (SPRBT)

Judicial Retirement Benefits Trust (JRBT)

RI Judicial Retirement Fund Trust (RIJRFT)

RI State Police Retirement Fund Trust (SPRFT)

Rhode Island Defined Contribution Plan

Prepared by the staff of the

Employees' Retirement System of Rhode Island

EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND

FISCAL YEAR ENDED JUNE 30, 2017

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Seth Magaziner
General Treasurer
Chair

William B. Finelli
Vice Chair

Roger P. Boudreau

Mark A. Carruolo

Brian M. Daniels

Michael DiBiase

Paul L. Dion

Thomas M. Lambert

John P. Maguire

Marianne F. Monte

Thomas A. Mullaney

Claire M. Newell

Marcia B. Reback

Jean Rondeau

Laura Shawhughes

Frank J. Karpinski
Executive Director

December 29, 2017

Dear Governor Raimondo, Speaker Mattiello, Senate President Ruggerio, Secretary of State Gorbea, and Members of the Retirement Board for the Employees' Retirement System of Rhode Island:

We are pleased to present you with this Comprehensive Annual Financial Report of the Employees' Retirement System of Rhode Island (ERSRI) for the fiscal year ending June 30, 2017. As required by Rhode Island General Law §36-8-8, this report is intended to provide the Governor, the General Assembly, members and beneficiaries of the System, and the public with current financial information and an overall status report on the operation of the System.

Management Responsibility

The management of ERSRI is responsible for the complete and fair presentation of the financial information and the accompanying disclosures in this report.

ERSRI management is responsible for ensuring that an adequate internal control structure is in place to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized user disposition and the reliability of financial records for preparing financial statements in conformity with generally accepted accounting principles (GAAP). The concept of reasonable assurance recognizes that the costs of internal control should not exceed the benefits likely to be derived and that the evaluation of costs and benefits requires management to make estimates and judgments. The internal control structure is subject to periodic evaluation by management and the System's internal auditors to ensure compliance with applicable laws and regulations.

Financial Information

The basic financial statements have been prepared in accordance with GAAP. The Management's Discussion and Analysis (MD&A) provides a narrative introduction, overview, and analysis to accompany the basic financial statements This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found immediately following the independent auditors' report.

Profile of ERSRI

The System is administered by the fifteen members of the State of Rhode Island Retirement Board which was authorized, created and established in the Office of the General Treasurer as an independent retirement board to hold and administer, in trust, the funds of the retirement system. The composition of the Board is listed in the notes to the financial statements and Rhode Island General Law §36-8-4.

The System's purpose is to provide service retirement, disability retirement, and survivor benefits to state employees, public school teachers, certain general and public safety municipal employees, state police officers, and judges.

ERSRI is responsible to administer seven (7) defined benefit plans and one (1) defined contribution plan:

(1) The Employees' Retirement System (ERS), established in 1936, which includes the retirement assets of all state employees and public school teachers;

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E-Mail: ersri@ersri.org **Web Site:** www.ersri.org

(2) The Teachers' Survivors Benefit Plan (TSB), which provides survivor benefits for teachers who do not participate in Social Security;
(3) The Municipal Employees' Retirement System (MERS), established in 1951, which is the municipal retirement plan covering participating municipal units (each unit is valued independently);
(4) The Judicial Retirement Benefits Trust (JRBT) which included judges appointed after December 31, 1989;
(5) The State Police Retirement Benefits Trust (SPRBT) which includes state police hired after July 1, 1987;
(6) The Rhode Island Judicial Retirement Fund Trust (RIJRFT), established July 1, 2012, which covers active judges appointed prior January 1, 1990 and do not participate in the JRBT;
(7) The State Police Retirement Fund Trust (SPRFT), established June 8, 2016, for the purpose of paying retirement benefits to participating members of the state police initially hired on or before July 1, 1987, or their beneficiaries;
(8) The State of Rhode Island Defined Contribution Retirement Plan - the plan covers members of the defined benefit plan within the Employees' Retirement System of Rhode Island with less than 20 years of service as of June 30, 2012, excluding legislators, correctional officers and MERS general police and fire employees who participate in Social Security. For covered employees, participation in the defined contribution plan is mandatory. Judges and state police officers are excluded from the Plan.

Each plan's assets are accounted for separately and may be used only for the payment of benefits to the members of that plan, in accordance with the terms of each plan.

ERSRI's financial statements are included as Pension Trust Funds within the Fiduciary Funds in the Comprehensive Annual Financial Report of the State of Rhode Island and Providence Plantations. The accompanying financial statements are not intended to present the financial position and results of operations of the State of Rhode Island.

Membership

As of June 30, 2017, active membership in the Employees' Retirement System totaled 24,462. The Municipal Employees' Retirement System totaled 7,501 and 7,121 active teachers were in the Teachers' Survivors Benefit Plan. There are currently 55 judges contributing to the Judicial Retirement Benefits Trust, 232 state police contributing to the State Police Retirement Benefits Trust, and 5 judges contributing to the Rhode Island Judicial Fund Trust. A total of 28,661 retirees and beneficiaries were receiving benefits from the System. As of June 30, 2017 there are 35,012 participants in the State of Rhode Island Defined Contribution Plan.

Financial Performance

The major additions for all ERSRI plans are employee and employer contributions, and investment earnings. Total additions for the fiscal year ending June 30, 2017 included $733,800,000 in contributions from employers and employees and net investment income of $942,320,000.

The deductions from the funds consist primarily of payments made to members and beneficiaries for retirement, disability, death, or survivor benefits. In total, benefit payments for the fiscal year ending June 30, 2017 were $980,358,000.

Administrative expenses of the retirement system are paid from a restricted receipt account that is used solely to pay such expenses. This account is financed through investment earnings up to a maximum of 0.175% of the average total investments before lending activities as reported in the annual report of the Auditor General for the next preceding five (5) fiscal years. Any non-encumbered funds at June 30th are transferred back to the retirement fund. Administrative expenses incurred by the system for the fiscal year ended June 30, 2017 amounted to $8,380,000.

For the fiscal year ended June 30, 2017 the administrative costs of the defined contribution plan were financed through a budgetary appropriation and participant fees, and are reflected in the State's General Fund. Administrative costs that were allocated to the defined contribution plan as part of the Office of the General Treasurer's operating budget for the fiscal year ended June 30, 2017 were $140,300. Fees paid to TIAA via participant fees were $1,178,000 for fiscal year ended June 30, 2017.

Funding

The ERSRI plans are funded through three sources; (1) investment earnings, (2) employee contributions as prescribed in RI General Law for each trust, and (3) employer contributions. Employer contribution rates for ERSRI are determined actuarially. The rate consists of two pieces: the normal cost rate and the amortization rate. The normal cost rate is the employer's Entry Age normal cost, expressed as a percentage of active member payroll. The amortization rate is the contribution required to amortize the unfunded actuarial accrued liability over a number of years as a level percentage of payroll. The employer contribution rates recommended by the actuary must be approved by the ERSRI Retirement Board before they can become effective for each fiscal year.

The actuary determines the actuarial accrued liability of the Plans, which is a measure of the present value of accrued liabilities that is estimated to be payable in the future to current retirees, beneficiaries, and employees for service earned to date. The percentage computed by dividing the actuarial value of net assets for benefits by the actuarial accrued liability is referred to as the funded ratio. The higher the funded ratio, the greater the degree of overall financial health and stability for the pension fund. The funded status alone is not appropriate for assessing the need for future contributions. Also, the funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.

The funding objective of the ERSRI is to attempt to develop stable contribution rates and to achieve a funded status of 100%. Per the most recently available actuarial valuation dated June 30, 2016 the funded ratio for State employees decreased from 56.6% to 56.0%, while for teachers the ratio decreased from 58.8% to 58.3%. During the same period, the funded ratio increased from 96.8% to 98.6% for the judges. For the state police, the ratio decreased from 98.7% to 91.4%. The funded ratio for the Rhode Island Judicial Fund Trust is 2.6%. The ratios are based on the Entry Age Normal funding method effective June 30, 1999.

The Municipal Employees' Retirement System (MERS) prepares separate valuations for each participating unit. For reference purposes only, the overall funded ratio for MERS – general employees was 84.4% and MERS – public safety employees was 83.0% per the June 30, 2016 valuation. Consequently, each unit has its own funding ratio that can be found in the Municipal Employees' Retirement System Actuarial Valuation Report at www.ersri.org.

Net Pension Liability

The total pension liability is the actuarial present value of projected benefit payments attributed to past periods of employee service. The total pension liability is based on the Entry Age Normal funding method. The fiduciary net position is based on the fair market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations based on the Board's adopted assumptions and methods). The net pension liability is measured as the total pension liability, less the amount of the fiduciary net position.

The Net Pension Liability is an accrual accounting measurement calculated in conformity with Governmental Accounting Standard Board (GASB) Statement No. 67 for the Trust and No. 68 for the employer units. The unfunded liability is a funding measure calculated according to generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

ERSRI provides the calculation of Net Pension Liability to comply with GASB's financial reporting requirements and is not applicable for the purposes of funding each Trust or used in the development of the contribution rates for participating employers.

Investments

Assets are invested under the direction and authority of the State Investment Commission (SIC), which meets on a monthly basis. It is authorized, created and established in the office of the General Treasurer per Rhode Island General Law §35-10.

The SIC has established an asset allocation policy which may be amended by the SIC Board by a majority vote of its members. The SIC's asset allocation policy seeks to achieve the assumed rate of return adopted by the System over the long-term while reducing risk through the prudent diversification of the portfolio across various asset classes. The approved asset allocation policy is outlined in Note 5 to the Basic Financial Statements.

Pension Consulting Alliance (PCA) serves as the General Policy, Real Estate and Infrastructure Consultant to the State Investment Commission. Bank of New York Mellon serves as the pension fund custodian. Cliffwater serves as consultant on alternative investments, hedge funds, and private equities. TIAA serves as the record keeper for the State of Rhode Island Defined Contribution Plan and J.P. Morgan is the investment custodian of the defined contribution plan.

The annual time-weighted return (net of fees) on the portfolio for the one-year, three-year, and five-year periods ended June 30, 2017 were 11.62%, 4.41%, and 7.80%, respectively. A discussion regarding annualized returns and related benchmark indices for fiscal year 2017 is explained in the MD&A.

A more detailed exhibit of investment policies and investment performance for ERSRI are in the Investment Section of this report.

Major Initiatives

Board Governance

During fiscal year 2017, the ERSRI Board reviewed its functions to identify ways to improve the effectiveness of the Board and its Committees. After the review, the Board redesigned it Subcommittees, drafted new charters and created the following Subcommittees**:**

- **Audit/Risk/Compliance/Administration:** to assist the Retirement Board in fulfilling its oversight responsibilities with respect to procurement, financial planning, budgeting, accounting, business continuity, information technology, internal controls, internal audit, external audit, financial statements, compliance, and risk assessment and data security.

- **Governance:** to assist the Retirement Board in fulfilling its oversight responsibilities with respect to board governance, review of retirement laws, board member education, board evaluation, strategic planning, and oversight of senior staff.

- **Disability:** to assist the Retirement Board in fulfilling its oversight responsibilities with respect to the administration of disability benefits.

- **Member Services:** to assist the Retirement Board in fulfilling its oversight responsibilities with respect to retirement benefit administration; retirement system performance; and communications with members, employers and other stakeholders.

Investments

During fiscal year 2017 the SIC announced and adopted a new investment strategy for the ERSRI pension fund. The strategy is referred to as “Back to Basics.” Under the “Back to Basics” plan, ERSRI will reduce its investments in hedge fund strategies and reallocate those funds to more traditional asset classes.

Back to Basics was the result of an extensive review of ERSRI’s pension investments launched earlier this year by Treasurer Seth Magaziner, involving many of the State's leading financial experts. Among those participating in the review were the members of the State Investment Commission and Employees’ Retirement System Board, Treasury Investment staff, and Pension Consulting Alliance, a leading national pension investment advisor.

Under “Back to Basics,” a majority of the pension fund will be invested in strategies designed to produce strong returns over time. These growth and income strategies mainly consist of low-fee index funds. The rest of the portfolio will be invested in assets designed to protect the pension system against market risks such as inflation and volatility.

Information Technology

During fiscal year 2017 ERSRI completed the third and final phase of a multi-year upgrade of its information technology platform for benefits administration. The final phase implemented a modern technology platform that will enable ERSRI to deliver improved customer service. As part of this upgrade ERSRI redesigned its website for members that was launched during the fall.

The new system includes an enhanced Customer Relationship Management tool, which will enable ERSRI staff to deliver better service to its members. Retirement counselors will have the ability to monitor and reduce wait times on service calls, and log every customer interaction so that members do not have to provide the same information every time they call ERSRI.

The new system provided a new, easy to use benefit estimate tool, a more streamlined way to ask questions and interact with our service team, and the ability to download retirement packages and other forms through the ERSRI website.

The new system will allow for future integration between ERSRI and the 401(a) (Defined Contribution Plan) websites, so that members can see both their defined benefit and defined contribution information on one site.

Legislation

Listed below is a summary of the relevant legislation enacted by the General Assembly during the 2017 session.

H5071/S0571 Sub A

This legislation revised Rhode Island General Law §16-16-26. This legislation increased the monthly minimum benefits of spouses and domestic partners of retired teachers that participate in the Teachers’ Survivors Benefit Plan.

In addition, the legislation revised Rhode Island General Law §16-16-35. The annual salary limit used in the calculation of the 2% contribution rate due to the Teachers Survivors’ Benefit Plan was increased from $9,600 to $11,500; one-half (1/2) of the cost shall be contributed by the member by deductions from his or her salary, and the other half (1/2) shall be contributed and paid by the respective city, town, or school district by which the member is employed.

H5368/S213 Sub A
This legislation revised Rhode Island General Law §36-10-36(d)(2). This legislation changed the post retirement reporting requirements of retired employees employed at any state college, university, or state school for the purpose of providing classroom instruction, academic advising of students, and/or coaching. This amendment increased the compensation limit that can be earned by a retiree in these positions from $15,000 to $18,000 in any one calendar without any forfeiture or reduction of their pension benefits.

H6130 AA/S0207 Sub B
This legislation revised Rhode Island General Law §36-10-36(d)(4). This legislation changed the post reporting requirements of retired registered nurses providing professional nursing care and/or services at a state-operated facility in Rhode Island from earned salary to number of days worked. The amendment allows retired state employee nurses to work, as professors in the nursing program at a state college or university, seventy-five (75) days or one hundred (150) half days in one calendar year without any forfeiture or reduction of their pension payments.

Professional Services

Mark R. Randall, Joseph P. Newton, and Paul T. Wood of Gabriel Roeder Smith & Company provide actuarial services to the ERSRI, while Michael P. Robinson, Esquire, of the law firm Shechtman, Halperin, Savage, LLP of Pawtucket, Rhode Island serves as the Retirement Board's general counsel. Private attorneys are hired on a per diem basis to serve as hearing officers for the System on disputed retirement issues.

In addition to Dr. Christopher Ley, who serves as the Medical Advisor to the Board's Disability Subcommittee, the System hires independent physicians who conduct medical exams of the System's disability applicants.

Finally, the Office of the Auditor General conducts an annual financial audit for each trust within the Employees' Retirement System of Rhode Island.

A separate schedule of professional consultants is included in the Introductory Sections of this report.

Awards

ERSRI received the 2017 Public Pension Standards Award. The Public Pension Coordinating Council (PPCC) presents this award to public employee retirement systems in recognition of their achievement of high professional standards in the areas of comprehensive benefits administration, actuarial valuations, financial reporting, investments, and membership communications.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators: NASRA, the National Council on Teacher Retirement (NCTR) and the National Conference on Public Employee Retirement Systems (NCPERS).

The PPCC established the Public Pension Standards to reflect minimum expectations for public retirement system management, administration, and funding. The Standards serve as a benchmark by which to measure public defined benefit plans.

Reports to Members

Real-time active member information regarding contributions and creditable service, as well as retiree member information, is found on the System's website at www.ersri.org.

Active and retired members also receive newsletters and other notices on an ad hoc basis.

Acknowledgments

The preparation of this report is possible only through the combined efforts of the ERSRI staff. Additionally, we would like to thank the Retirement Board, the actuarial team at Gabriel Roeder Smith & Company, the Office of the Auditor General, and the Office of Accounts and Control. Finally, this report is intended to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining responsible stewardship for the assets contributed by the System's members and their employers.

We welcome your comments on the issuance of this report.

Respectfully submitted,

Frank J. Karpinski	Zachary J. Saul
Executive Director	Chief Financial Officer

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Employees' Retirement System of Rhode Island

ERSRI Board:

Seth Magaziner
General Treasurer
Chair

William B. Finelli
Vice Chair

Roger P. Boudreau

Mark A. Carruolo

Brian M. Daniels

Michael DiBiase

Paul L. Dion

Thomas M. Lambert

John P. Maguire

Marianne F. Monte

Thomas A. Mullaney

Claire M. Newell

Marcia B. Reback

Jean Rondeau

Laura Shawhughes

Frank J. Karpinski
Executive Director

December 22, 2017

To the Members and Beneficiaries of the Employees' Retirement System of Rhode Island:

On behalf of the Board of the Employees' Retirement System of Rhode Island (ERSRI), I am pleased to present the Fiscal Year 2017 Comprehensive Annual Financial Report.

This report describes the financial condition of the system, changes that occurred during the fiscal year, and covers important information related to the management of the system, including investment performance.

ERSRI realized 11.62% in net performance for the fiscal year, outperforming the plan's benchmark and growing to $8,066,400,000 in the fiscal year ending on June 30, 2017. It is important to note that these returns are for a single year and must be considered in the context of the portfolio's return over time. The relative performance of the fund has also been strong over multiple time periods. Over a five-year period, net performance the fund was 7.8% per year and 4.4% over the ten-year period, matching or outperforming the system's benchmark for all the respective time periods.

During Fiscal Year 2017 progress was made toward implementation of the new Back to Basics asset allocation policy which is expected to continue improving the performance of the portfolio while reducing risk. As of this writing, ERSRI has redeemed more than $500 million from seven hedge funds, reallocating the assets into more traditional investments.

The System conducted an actuarial experience study in May 2017 and voted to further strengthen the system's funding policy by lowering the assumed rate of return from 7.5% to 7.0%, joining pension plans across the country in adopting more realistic investment return assumptions. Using honest assumptions will bring more money into the plan over the next 10 to 20 years, enhancing the funded ratio compared to the previous assumptions.

Following twenty-four years with ERSRI, sixteen of them as Assistant Executive Director, Diane Bourne retired in May 2017. Because of Ms. Bourne's dedication, ERSRI is a better-run organization, and we are grateful for her service to our members.

Kate Brock, who previously served as Director of Member Services, has been appointed to serve as ERSRI's new Assistant Executive Director. Ms. Brock successfully led ERSRI's transition to a modern technology platform that enables us to deliver better service to members. The new software, which was deployed system-wide, allows our members to securely access retirement information and communicate with our service team. Moving forward, Ms. Brock is leading an initiative to validate information for each of our nearly 68,000 members.

Because of the work of our staff and board, the System is in its strongest financial position in nearly a decade. We are also pleased with the progress of improving operational efficiency across the system. However, we know that there is much more work to do. Our team will be working to implement significant improvements to our member service experience, including extended hours, streamlined data processing, and increased communication with our members.

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Together, we are working to ensure retirement security for Rhode Island teachers, State and municipal employees, public safety officers and other public servants.

Sincerely,

Seth Magaziner
General Treasurer

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E-Mail: ersri@ersri.org **Web Site:** www.ersri.org

The 15-member State Retirement Board oversees the Employees' Retirement System of Rhode Island.

The State Retirement Board, as of June 30, 2017, included:

General Treasurer Seth Magaziner, *Chair, Ex Officio Member*

William B. Finelli, Vice Chairperson, *Teacher Representative*

Roger P. Boudreau, *Retired Member Representative*

Mark A. Carruolo, *Public Representative (appointed by the General Treasurer)*

Brian M. Daniels, *Director, Rhode Island League of Cities and Towns, Ex Officio Member*

Michael DiBiase, *Director of Administration*

Paul L. Dion, Ph.D., *State Employee Representative*

Thomas M. Lambert, *Municipal Representative*

John P. Maguire, *Teacher Representative*

Marianne F. Monte, *Public Representative (appointed by the General Treasurer)*

Thomas A. Mullaney, Associate Director/*State Budget Officer (appointed by Director of Administration)*

Claire M. Newell, *State Employee Representative*

Marcia B. Reback, *Retired Member Representative*

Jean Rondeau, *Public Representative (appointed by the Governor)*

Dr. Laura Shawhughes, *Public Representative (appointed by the General Treasurer)*

The State Investment Commission is responsible for the investment of the assets of the Employees' Retirement System, the Municipal Employees' Retirement System, the State Police Retirement Benefits Trust, the Judicial Retirement Benefits Trust, the Rhode Island Judicial Retirement Fund Trust, the State Police Retirement Fund Trust, and the State of Rhode Island Defined Contribution Retirement Plan.

The State Investment Commission, as of June 30, 2017, included:

General Treasurer Seth Magaziner, *Chair*

Robert K. Benson, *General Treasurer's Appointee*

J. Michael Costello, *Governor's Appointee*

Thomas Fay, *Governor's Appointee*

Karen Hammond, *Governor's Appointee*

Frank J. Karpinski, *Executive Director, Non-voting Member*

Marie Langlois, *General Treasurer's Appointee*

Sylvia Maxfield, *General Treasurer's Appointee*

Thomas Mullaney, *Director of Administration's Designee*

Marcia Reback, *General Treasurer's Appointee*

Alec Stais, *Chief Investment Officer*

Pension Consulting Alliance (PCA), *General Policy & Real Estate Consultant to the State Investment Commission*

Cliffwater, *Alternatives Investment (Hedge Funds/Private Equities) Consultant to the State Investment Commission*

Bank of New York Mellon, *Custodian Bank*

Professional Managers, Advisors & Service Providers

Actuarial Consultant
Gabriel Roeder Smith & Co.

Legal
Adler Pollock & Sheehan P.C.
Grant & Eisenhofer P.A.
Hinckley, Allen, & Snyder LLP
Schechtman Halperin Savage LLP

Internal Audit
Blum Shaprio

Independent Auditors
R.I. Office of the Auditor General

Medical Advisor
Dr. Christopher Ley, MD

Other Consultants
Hewlett-Packard
Morneau Shepell

Investment Advisor
Cliffwater LLC
Pension Consulting Alliance

Investment Custodian
BNY Mellon - Defined Benefit Plan
TIAA - Defined Contribution Plan

Global Equities
Hamilton Lane
State Street Global Advisors

Fixed Income
Fidelity Institutional Asset Management
MacKay Shields

Real Return
Brown Brothers Harriman
Pacific Investment Management Company
Western Asset Management Company

Private Equity
Advent International VIII
Aurora III
Bain Capital X
Baring Asia VI
Birch Hill Equity III
Braemar Energy Ventures
Capital Spring V
Carlyle Asia IV
Centerbridge Capital
Centerbridge Partners
Coller International V
CVC Capital VI
CVC Euro Equity IV
CVC Euro Equity V
Encap Energy X
Encap IX
Fenway III
Green Equity V
Industry Ventures
Industry Ventures III
LNK Partners
Nautic Partners VI
Nautic VII
Nautic VIII
Nordic Capital VII
Nordic Capital VIII
Paine & Partners
Paladin Holdings III
Point 406 Ventures
Providence Equity V
Providence Equity VI
Providence Equity VII
Pt Judith Venture II
Riverside Capital Appreciation
Riverside Micro-Cap III
Sorenson Capital III
Southwest Fund VII
Tenex Capital II
TPG Partners IV
TPG Partners VI
Trilantic Capital IV

Public Infrastructure
Harvest Partners

Private Infrastructure
ISQ Global
Stonepeak Infra Fund II

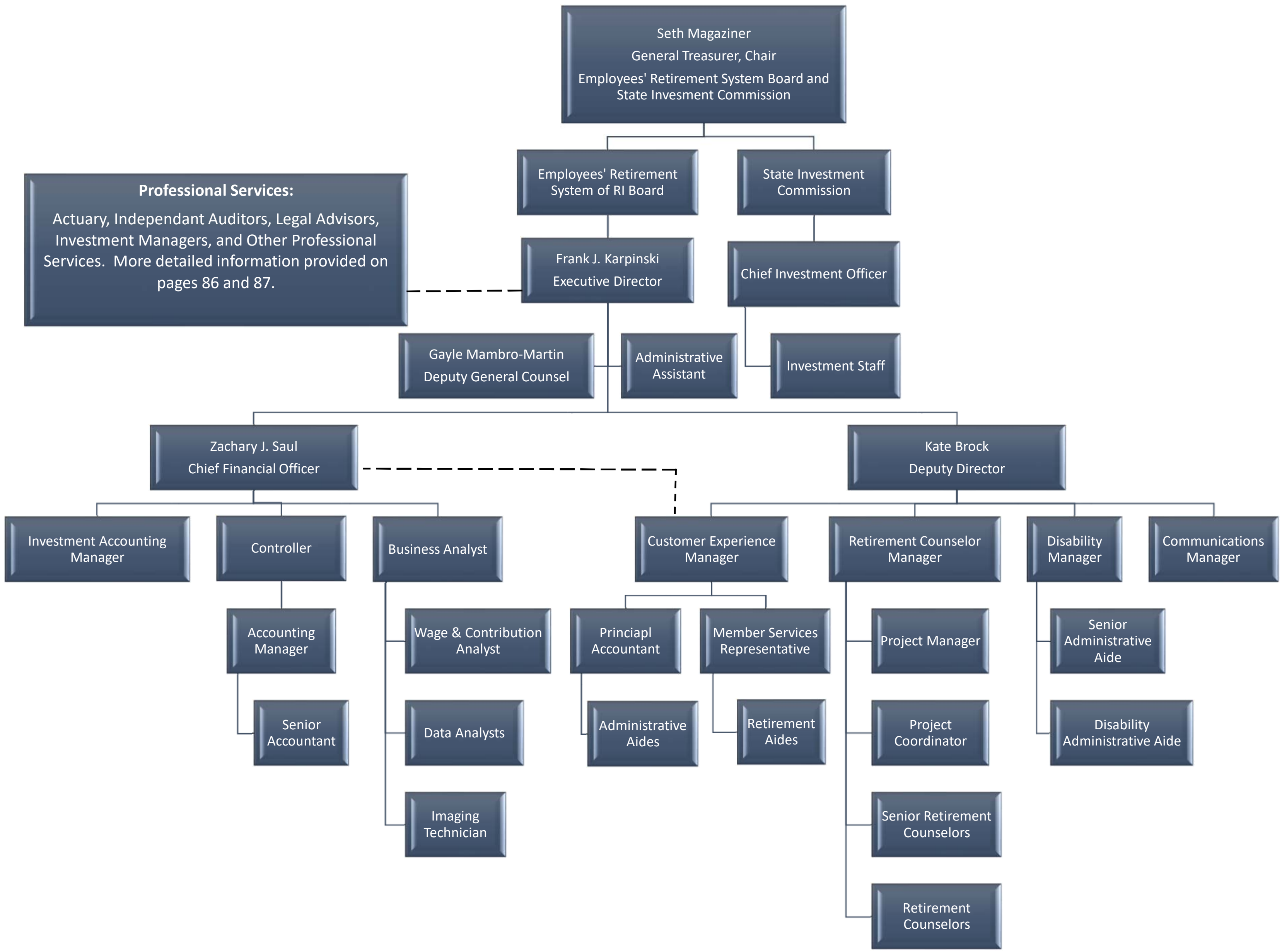
Real Estate
Crow Holdings I
Heitman America
IC Berkeley Partners IV
JP Morgan Strategic Property
Magna Hotel Fund III
PRISA
Waterton Venture XII

Crisis Protection
Aberdeen Asset Management
CPC CB LLC
CPC QIS LLC
MacKay Shields
Western Asset Management Company

Other - Investment
Payden & Rygel
Russell Investments

Day-to-day operations of the Employees' Retirement System of Rhode Island are overseen by the following administrators (as of June 30, 2017):

Frank J. Karpinski, *Executive Director*
Zachary J. Saul, *Chief Financial Officer*
Kate Brock, Deputy *Director*
Michael P. Robinson, Esquire, *Retirement Board Counsel*


Seth Magaziner
General Treasurer, Chair
Employees' Retirement System Board and State Invesment Commission
Employees' Retirement System of RI Board
State Investment Commission
Professional Services:
Actuary, Independant Auditors, Legal Advisors, Investment Managers, and Other Professional Services. More detailed information provided on pages 86 and 87.
Frank J. Karpinski
Executive Director
Chief Investment Officer
Gayle Mambro-Martin
Deputy General Counsel
Administrative Assistant
Investment Staff
Zachary J. Saul
Chief Financial Officer
Kate Brock
Deputy Director
Investment Accounting Manager
Controller
Business Analyst
Customer Experience Manager
Retirement Counselor Manager
Disability Manager
Communications Manager
Accounting Manager
Wage & Contribution Analyst
Princiapl Accountant
Member Services Representative
Project Manager
Senior Administrative Aide
Senior Accountant
Data Analysts
Administrative Aides
Retirement Aides
Project Coordinator
Disability Administrative Aide
Imaging Technician
Senior Retirement Counselors
Retirement Counselors

Financial Section

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Supplementary Information

Independent Auditors’ Report on Internal Control and Compliance

Office of the Auditor General
State of Rhode Island and Providence Plantations - General Assembly
Dennis E. Hoyle, CPA - Auditor General
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INDEPENDENT AUDITOR'S REPORT

JOINT COMMITTEE ON LEGISLATIVE SERVICES, GENERAL ASSEMBLY
STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS:

RETIREMENT BOARD OF THE EMPLOYEES' RETIREMENT SYSTEM OF THE
STATE OF RHODE ISLAND:

Report on the Financial Statements

We have audited the accompanying financial statements of the plans which comprise the Employees' Retirement System of the State of Rhode Island (the System) as of June 30, 2017 and for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Joint Committee on Legislative Services, General Assembly
Retirement Board of the Employees' Retirement System

Opinions

In our opinion, the financial statements of the plans referred to above present fairly, in all material respects, the financial position of the plans within the System as of June 30, 2017, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As described in Note 1, the financial statements of the System present only the pension trust funds of the State of Rhode Island and Providence Plantations (the State) and do not purport to, and do not present fairly the financial position of the State, as of June 30, 2017 and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

As described in Note 2, the System's financial statements for the year ended June 30, 2017 include a new trust fund established for certain retired state police members hired before July 1, 1987 – State Police Retirement Fund Trust. The State previously provided benefits to these retirees on a pay-as-you-go basis.

The fair values of certain investments (hedge funds, private equity, real estate, certain infrastructure, and the crisis protection class - trend following investments) representing 26% of assets within the pooled investment trust, have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or general partners.

As described in Note 3, certain investment expenses are customarily reported on a net of fees basis and consequently such amounts are not included with other investment expenses as they are not readily separable.

As described in Note 8, the Board of the Employees' Retirement System revised its investment return assumption from 7.5% to 7.0% which has been reflected in the determination of the net pension liability or asset for each of the plans (excluding the RIJRFT plan which used a discount rate of 3.56%) as of the June 30, 2017 measurement date.

As described in Note 8, the plan fiduciary net position for the RIJRFT plan represents only 3.2% of the total pension liability of that plan at the June 30, 2017 measurement date. Employer contributions were significantly less than actuarially determined amounts. Additional employer contributions will be required to provide benefits to plan members.

Our opinions are not modified with respect to these matters.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 10 and other required supplementary information as listed in the table of contents and pages 51 through 69 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We

Joint Committee on Legislative Services, General Assembly
Retirement Board of the Employees' Retirement System

have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The supplementary information, such as the Schedules of Investment, Administrative, and Consultant Expenses, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The Schedules of Investment, Administrative, and Consultant Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules of Investment, Administrative, and Consultant Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have issued a report dated December 20, 2017 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Dennis E. Hoyle, CPA
Auditor General

December 20, 2017

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Management's Discussion and Analysis

Management's Discussion and Analysis

Management of the Employees' Retirement System of the State of Rhode Island (the System) provides this Management's Discussion and Analysis of their financial performance for the readers of the System's financial statements. This narrative provides an overview of the System's financial activity for the fiscal year ended June 30, 2017. This analysis is to be considered in conjunction with the financial statements to provide an objective analysis of the System's financial activities based on the status of the System and issues currently facing management.

Understanding the Employees' Retirement System Financial Statements

The System administers seven defined benefit pension plans for state employees, teachers, teachers' survivors, state police, judges, and employees of participating municipalities. State employees and teachers are combined into one cost-sharing plan while teachers' survivors, state police, judges appointed after December 31, 1989, active judges appointed before January 1, 1990, and municipal employees each have separate plans. The System also administers a defined contribution plan for certain state employees, teachers, and employees of participating municipalities.

The *Statements of Fiduciary Net Position* provide a snapshot of the financial position of the System at June 30, 2017. The *Statements of Changes in Fiduciary Net Position* summarize the additions and deductions that occurred during the fiscal year.

The *Notes to the Financial Statements* provide additional information essential to a full understanding of the financial statements.

The *Required Supplementary Information* consists of schedules and related notes, which over time will be built to present 10 years of historical data. These schedules present each plan's net pension liability (asset) and changes in the net pension liability (asset) between years. A schedule of investment returns presents the annual money-weighted return for each defined benefit plan. A schedule of contributions is presented for each plan, which details required and actual contributions to the plan including covered payroll information.

Financial Highlights for the Fiscal Year Ended June 30, 2017

- The System's fiduciary net position increased by $686.3 million from $8.1 billion at June 30, 2016 to $8.8 billion at June 30, 2017.

- Total pension benefits paid to members from the defined benefit plans were $953 million, an increase of $21.5 million or 2.3% compared to the fiscal year ended June 30, 2016.

- Contributions to all defined benefit plans from both employers and employees at June 30, 2017 were $610 million, an increase of $58 million or 10.7% compared to the fiscal year ended June 30, 2016.

- Total employee and employer contributions into the System's defined contribution plan were $116.4 million at June 30, 2017, an increase of $6.9 million.

- Total distributions paid to members from the defined contribution plan were $12.3 million.

- The net income from investing activities within the defined benefit plans (Pooled Investment Trust) was $867.4 million for the fiscal year ended June 30, 2017. Investment gains within the defined contribution plan totaled $74.9 million.

Financial Analysis

The System provides retirement and disability benefits from the defined benefit plan to state employees, public school teachers, participating municipal general and public safety employees, state police officers and judges. The ability to provide these benefits are funded through member and employer contributions and investment income. The fiduciary net position is available to satisfy the financial obligations to members, retirees, and beneficiaries.

The total net position restricted for pensions at June 30, 2017 increased to $8.8 billion when compared to $8.1 billion at June 30, 2016.

The following tables illustrate the condensed Fiduciary Net Position and condensed Changes in Fiduciary Net Position for the System for the fiscal years ended June 30, 2017 and June 30, 2016.

Assets, Liabilities and Fiduciary Net Position – All Plans
(in millions)

	June 30, 2017	June 30, 2016
Assets:		
Cash and cash equivalents	$ 14.4	$ 5.9
Investments	8,758.5	8,039.5
Contribution and other receivables	55.2	94.9
Total assets	8,828.1	8,140.3
Liabilities:		
Accounts payable	6.9	5.4
Total liabilities	6.9	5.4
Fiduciary Net Position:	$ 8,821.2	$ 8,134.9

Total assets increased by $687.8 million, or 8.4%, for the fiscal year ending June 30, 2017 when compared to fiscal year ending June 30, 2016. Cash and cash equivalents at June 30, 2017 were $8.5 million higher when compared to fiscal year ending June 30, 2016. This is the result of distributions from privately-held investment assets and the timing to maintain a cash reserve to meet monthly capital requirements. The increase in the total fiduciary net position can primarily be attributed to higher investment earnings. The increase of $719.0 million, or 8.9%, of investments can be attributed to an increase in the global markets and the allocation policy of the portfolio. Contributions and other receivables decreased $39.7 million, or -41.8%, due to a decrease in the amounts due from employers at June 30, 2017.

Total liabilities increased $1.5 million, or 27.8%, for the fiscal year ending June 30, 2017 due to an increase in the amounts due to other plans within ERSRI.

Summary of Changes in Fiduciary Net Position – All Plans
(in millions)

	Year Ended June 30, 2017	Year Ended June 30, 2016
Additions:		
Contributions	$ 726.6	$ 660.7
Net investment gain (loss)	942.3	(4.0)
Total Additions	1,668.9	656.7
Deductions:		
Benefits and distributions	965.6	940.9
Refunds of contributions	7.5	8.0
Administrative expenses	9.5	8.6
Total Deductions	982.6	957.5
Increase (Decrease) in Net Position:	686.3	(300.8)
Fiduciary Net Position:		
Beginning of year	8,134.9	8,435.7
End of year	$ 8,821.2	$ 8,134.9

Additions to Net Position

The revenues required to fund retirement and disability benefits for the defined benefit plans are accumulated from the contributions from employees and employers, as well as investment earnings. Employee and employer contribution revenue at June 30, 2017 was $497.8 million for the defined benefit plan, an increase of 7.6% when compared to $462.6 million at June 30, 2016. Employee and employer contributions to the defined contribution plan was $116.4 million at June 30, 2017, an increase of 6.3% when compared to $109.5 million at June 30, 2016.

The State of Rhode Island's contributions for their portion for teachers' retirement at June 30, 2017 was $96.5 million for the defined benefit plan, an increase of 9.8% when compared to $87.9 million at June 30, 2016.

The State Police Retirement Fund Trust was established during fiscal year 2017. Upon the establishment of the Trust, the State of Rhode Island made a supplemental contribution in the amount of $15 million.

Contributions from employees and employers (except for the RIJRFT and SPRFT) are based on covered payroll. During fiscal year 2017 the covered payroll for each Trust experienced an increase when compared to fiscal year 2016. The contribution rates for the members are prescribed in Rhode Island General Law and fixed by statute. The employer contributions are actuarially determined through annual funding valuations and are adjusted accordingly to meet the financial obligations of each Trust.

The System recognized $942.3 million in net investment gains at June 30, 2017. Improvement in the financial markets is the primary factor for the increase in net position. The investment portfolio for the defined benefit plan recognized a net return of 11.62% at June 30, 2017.

Deductions from Net Position

ERSRI was established to administer the funds of each Trust in order to provide lifetime retirement, survivor, and disability benefits to its membership. The primary categories that reduce the net position are benefit payments and distributions, refunds of contributions to members exiting the System, and the administrative expenses to cover the operations of the System.

Benefits and distributions to members from the defined benefit plan at June 30, 2017 were $953.3 million, an increase of 2.3% when compared to $931.7 million at June 30, 2016. The increase is the result of moderate cost-of-living increases to eligible employees, increase in the number of retirees, and the increase of higher average salaries of new retirees.

Distributions to members from the defined contribution plan at June 30, 2017 were $12.3 million, an increase of 33.7% when compared to $9.2 million at June 30, 2016. The increase is the result of the increased number of retirees eligible to elect distributions from this plan. This plan was created on July 1, 2012 for eligible members that did not have 20 years of service credit at June 30, 2012. Distributions are expected to increase as this plan matures and becomes a more significant portion of a member's retirement portfolio within the System.

Refunds of contributions from the defined benefit plan at June 30, 2017 were $7.5 million, a decrease of 6.3% when compared to $8.0 million at June 30, 2016. The decrease in refunds is the result of a decrease in the number and dollar value of refund requests from terminated members.

Administrative expenses for both the defined benefit and defined contribution plans at June 30, 2017 were $9.5 million, an increase of 10.5% when compared to $8.6 million at June 30, 2016. The increase in fiscal year 2017 can be attributed to costs associated with the upgrade of the line-of-business system, professional services, and facilities charges. Details of administrative expenses are listed in the *Schedule of Administrative Expenses* in the Supplementary Information section of this report.

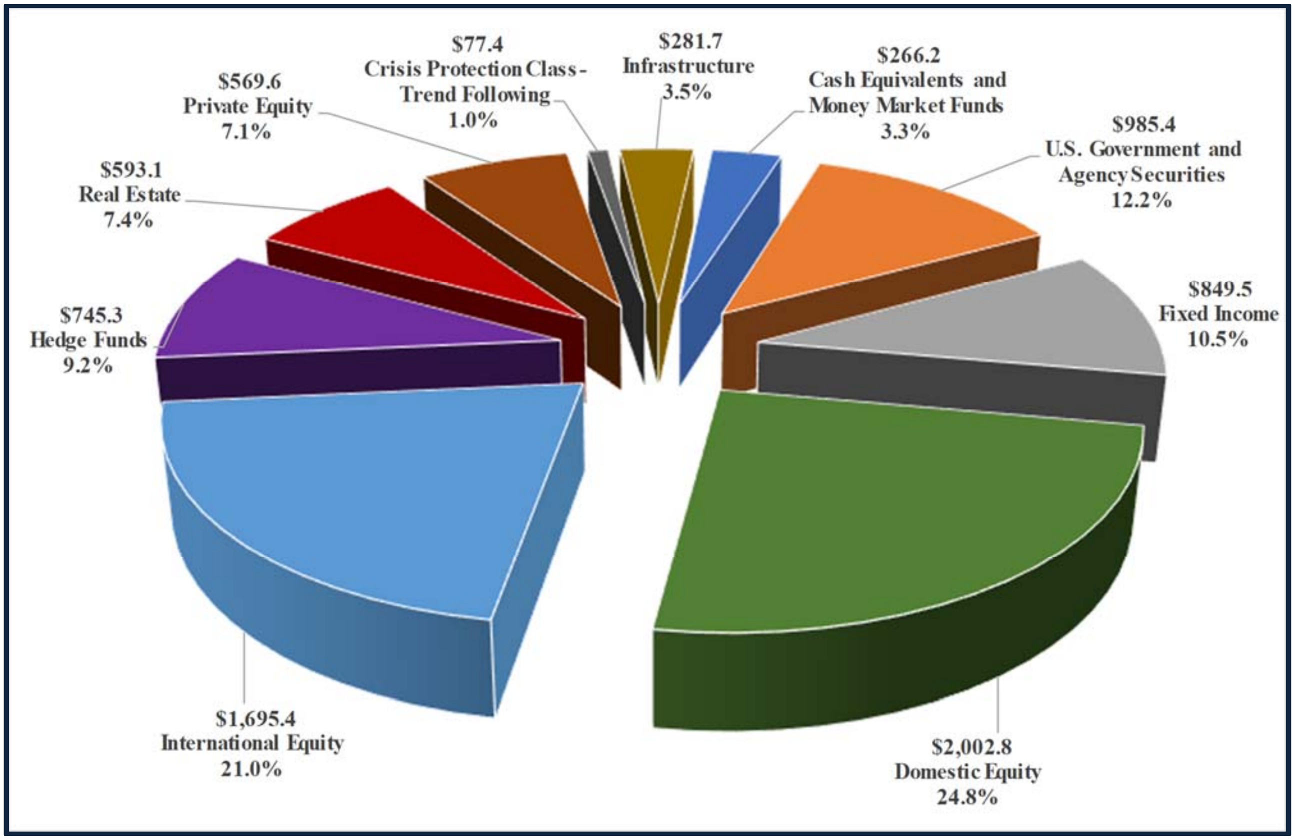
Investments

The State Investment Commission (SIC) establishes long-term asset allocation policy, selects managers, and monitors investment performance of the plan. An asset allocation study is conducted every two to four years to identify an optimal diversified investment portfolio that maximizes return within an acceptable level of risk. As long-term investors, the SIC stays committed to the strategic asset allocation that has been developed as part of a comprehensive asset allocation study. The asset allocation study incorporates return expectations, risks and correlations associated with each asset class, as well as the unique profile and objectives of the System.

The SIC seeks to achieve a strong rate of investment return within an acceptable level of risk while satisfying the plan's need for steady cash flows. As a mature defined benefit plan where distributions exceed contributions, the System must balance its short-term cash flow requirements with the much longer time horizon of its total obligations. Diversification across asset classes that respond differently to different market environments is a key tool used by the SIC to seek strong long-term returns. The allocation of assets among stocks, bonds, and alternative investments can have a significant impact on risk-adjusted investment performance.

In June 2016, a new asset allocation study was carried out. Based on the study, significant changes were made to the current investment strategy. The study reframed the asset allocation, moving away from traditional classifications of asset classes and towards a function-based categorization of asset classes. Among the highlights of the new "Back to Basics" strategy adopted in 2016 is a significant reduction in the use of hedge funds. The study proposed a larger allocation to private assets (equity, credit, real estate and infrastructure), a dedicated allocation towards "income-based" strategies, and the introduction of a "Crisis Protection" asset class designed to outperform in periods of significant equity market decline. During fiscal 2017 progress was made toward implementation of the new strategy, with implementation set to continue in the coming years.

Pooled Investment Trust – Actual Asset Allocation - June 30, 2017
(in millions)

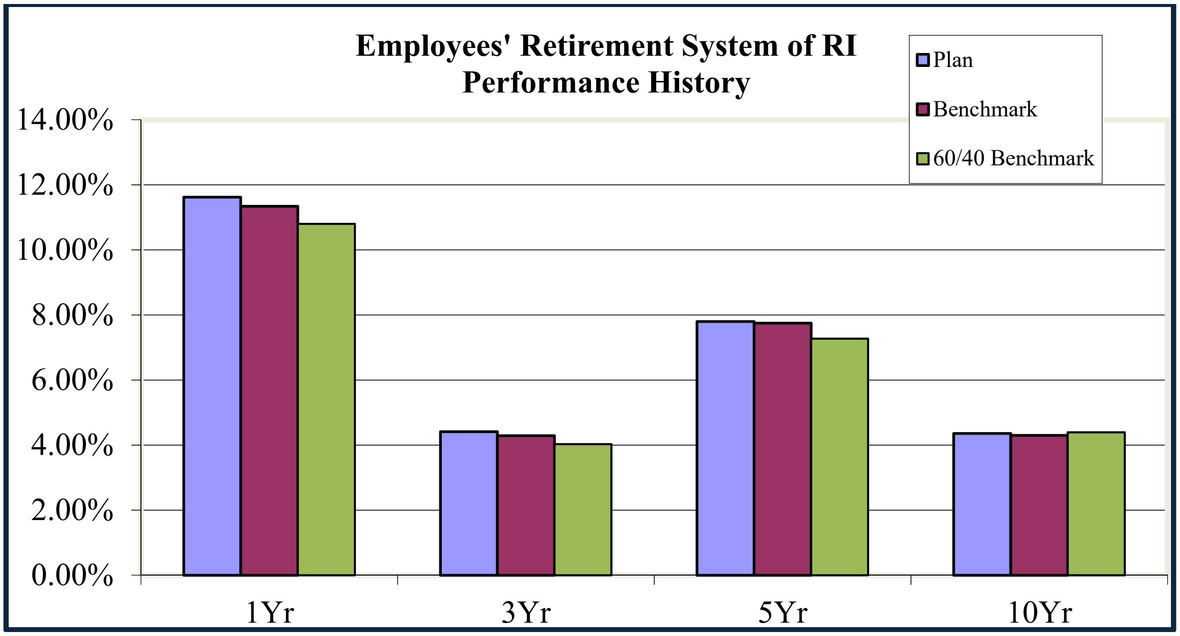


Having adopted the asset class targets of the most recent allocation study, the State Investment Commission will tactically adjust asset allocation targets based on market conditions and opportunities, as well as any timing required for prudent implementation. The SIC engages external investment managers to manage portions of the portfolio, and performance is measured in relation to benchmarks adopted for each asset category. A composite benchmark, based on weighted asset allocations, is used to measure overall manager performance. Asset allocation performance is assessed by comparing returns to a basic allocation of 60% global equities/40% bonds. The SIC assesses assets and managers over suitably long time frames, and on the basis of expected future returns.

For the defined contribution plan, the SIC has selected a menu of investment options, which are made available to participants. The options include, but are not limited to, target-date retirement funds corresponding to an employee's anticipated retirement date. Approximately 91% of defined contribution plan assets are invested in target-date retirement funds.

Investment Performance

The System's one-year, time-weighted net rate of return was 11.62% which was above the composite benchmark (11.34%) and the 60/40 basic allocation's (10.80%) return. The three-year average was 4.41%, which was 12bps above the 4.29% benchmark return and 38bps better than the 60/40 benchmark's 4.03% return. The five-year average was 7.80%, which exceeded the 7.75% benchmark return by 5 bps and was 53bps better than the 60/40 at 7.27%.



The composite benchmark is weighted based on asset allocation targets. It is currently comprised: **44.5%** MSCI All Country World Net Index; **15%** Barclays Aggregate; **7%** HFRI Fund of Funds Composite Index; **3%** Bank of America Merrill Lynch 3-month US Treasury Bill; **8.0%** HFRI Equity Hedge (Total) Index; **5.0%** NFI-ODCE Index; **4%** Barclays US Treasury Inflation Notes: 1-10 Year Index; **5%** custom loan and high yield index – 30% Bank of America Merrill Lynch 1-3 Year BB-B High Yield, 35% JP Morgan BB/B Leveraged Loan Index and 35% Credit Suisse Institutional Leveraged Loan Index; **7%** Institutional Limited Partners Association All Funds Index; and **1.5%** Alerian Master Limited Partnerships Total Return Index.
The composite benchmark for each of the years shown in the chart reflects the asset allocation targets in place for that fiscal year and the related indices used to measure performance.

The 60% global equity/40% bonds benchmark is 60% MSCI All-Country World and 40% Barclays Aggregate.

Additional Investment Performance Reporting

The investment performance discussed in the previous section is the time-weighted return, as reported by the System's investment custodian for the Pooled Investment Trust as a whole. As required by GASB Statement No. 67, investment performance is also measured on a money-weighted return basis for each defined benefit retirement plan. The money-weighted returns for each defined benefit plan are disclosed in the notes to the financial statements and the required supplementary information section. The money-weighted return reflects each individual plan's specific cash inflows and outflows, as well as the overall portfolio returns.

The System's actuarial investment return assumption beginning with funding valuations performed as of June 30, 2017 is 7.0% for all plans except the Judicial Retirement Fund Trust which uses a 4.0% investment return assumption. This return expectation is adopted by the Retirement Board on recommendation by the plan's actuary. It is based on a thirty-year horizon. The actuarial value of assets is determined based on a five-year smoothing methodology.

Fiscal 2017 investment returns within the defined contribution plan ranged from 0.99% to 14.80% depending on investment options that plan members chose from the available options.

Management's Discussion and Analysis

Net Pension Liability (Asset) of the Plans within the System

Independent actuarial valuations of the System are conducted each year. Due to the implementation of Governmental Accounting Standards Board (GASB) Statement No. 67 – *Financial Reporting for Pension Plan*s, the System presents the accounting measures of the net pension liability (asset) for each of the defined benefit plans. Calculation of the net pension liability (asset) of the plans is performed by the actuary in accordance with GASB requirements. The total pension liability and net pension liability are based on actuarial valuations performed as of June 30, 2016, rolled-forward to June 30, 2017 using generally accepted actuarial principles from the valuation date to the plan's fiscal year end.

This accounting measure of the net pension liability (asset) of each plan is different from the actuarial valuations performed for funding purposes and the determination of annual contributions to each of the defined benefit plans. One of the principal differences is that the accounting measure of the net pension liability at June 30, 2017 utilizes each plan's fiduciary net position, which reflects the fair value of investments at that date. For funding purposes, the actuarial valuation uses the actuarial value of assets, which reflects a five-year smoothed asset valuation.

The measurement of the net pension liabilities for all defined benefit plans, except for the RIJRFT, utilized the System's investment return assumption of 7.0%. The RIJRFT utilized the Municipal Bond Index rate of 3.56%. The calculation of the net pension liability (asset) was measured as of June 30, 2017.

The Teachers' Survivors Benefit plan was over-funded with a fiduciary net position equal to 136.1% of the plan's total pension liability at June 30, 2017. The fiduciary net position of the ERS plan covering state employees and teachers was equal to 51.8% and 54.0% respectively of the total pension liability measure for each of those employee groups. The fiduciary net position of the State Police and JRBT plans was equal to 84.1% and 89.8% respectively of the total pension liability measure for each of those employee groups. The fiduciary net position of the RIJRFT plan covering a small group of judges was equal to 3.2% of the total pension liability for that plan due to the recent formation of the plan and the State (employer) using a mostly pay-as-you-go funding approach. The fiduciary net position of the agent MERS plans covering general employees and police and fire personnel was equal to 78.5% and 74.9% respectively of the total pension liability measure for those employee groups. The fiduciary net position of a new plan created July 1, 2016 for retired state police hired before July 1, 1987 was 9.1% of the total pension liability reflecting a one-time initial contribution of $15 million from the State and the State's commitment to fund the benefits on an actuarially determined basis rather than the previous pay-as-you-go approach.

All employers participating in the System's plans contributed 100% of their annual actuarially determined contribution during fiscal 2017, except for the State not providing the full employer contribution for the Rhode Island Judicial Retirement Fund Trust.

Future Contribution Rates

The fiscal 2018 employer contribution rates are based upon the actuarial valuations performed for funding purposes at June 30, 2015. The employer contribution rates for fiscal 2018 are 24.87% for State employees, 23.13% for Teachers, 21.13% for Judges, and 12.22% for State Police. For the Rhode Island Judicial Retirement Fund Trust and State Police Retirement Fund Trust, the actuarially determined employer contribution is $1,200,000 and $16,387,092, respectively, for fiscal 2018.

Contacting the System's Management

This discussion and analysis presentation is designed to provide a general overview of the System's financial activity. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Employees' Retirement System, 50 Service Avenue, Warwick, RI, 02886.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Statements of Fiduciary Net Position

June 30, 2017

	Defined Benefit Plans							Defined Contribution Plan	Memorandum Total
	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT		
Assets									
Cash and cash equivalents (Note 4)	$ 12,764,678	$ 94,148	$ 899,072	$ 64,377	$ 547,643	$ 68,476	$ 2,459	$ -	$ 14,440,853
Receivables									
Contributions	23,011,260	3,099	3,793,145	-	-	-	-	-	26,807,504
Due from State for teachers	19,482,282	-	-	-	-	-	-	-	19,482,282
Other	1,024,294	10,776	208,817	2,824	-	33,251		-	1,279,962
Total receivables	43,517,836	13,875	4,001,962	2,824	-	33,251	-	-	47,569,748
Prepaid assets (Note 3)	3,921,164	180,947	847,878	65,642	33,646	178	-	-	5,049,455
							-		
Due from other plans	1,811,184	2,904	739,477	-	-	-	-	-	2,553,565
Investments at fair value									
Equity in pooled trust (Note 5)	6,064,829,742	311,690,236	1,476,230,876	129,707,033	67,339,406	544,936	16,015,338	-	8,066,357,568
Defined contribution plan investments (Note 6)	-	-	-	-	-	-		692,133,439	692,133,439
Total investments	6,064,829,742	311,690,236	1,476,230,876	129,707,033	67,339,406	544,936	16,015,338	692,133,439	8,758,491,007
Total Assets	6,126,844,604	311,982,110	1,482,719,265	129,839,876	67,920,695	646,841	16,017,797	692,133,439	8,828,104,628
Liabilities									
Accounts payable	3,618,778	21,677	613,170	50,991	25,466	212	4,088	-	4,334,382
Due to other plans	739,477	-	1,813,058	221	114	1	694	-	2,553,565
Total Liabilities	4,358,255	21,677	2,426,228	51,212	25,580	213	4,782	-	6,887,947
Net position restricted for pensions	$ 6,122,486,349	$ 311,960,433	$ 1,480,293,037	$ 129,788,664	$ 67,895,115	$ 646,628	$16,013,015	$ 692,133,439	$ 8,821,216,681

The accompanying notes are an integral part of this financial statement.

Statements of Changes in Fiduciary Net Position - Fiscal Year Ended June 30, 2017

	Defined Benefit Plans							Defined Contribution Plan	Memorandum Total
	ERS	**TSB**	**MERS**	**SPRBT**	**JRBT**	**RIJRFT**	**SPRFT**		
Additions									
Contributions (Note 7)									
Member contributions	$ 91,609,012	$ 589,883	$ 17,412,163	$ 2,061,465	$ 1,117,518	$ 116,667	$ -	$ 89,202,835	$ 202,109,543
Employer contributions	313,845,677	589,883	48,542,830	2,980,219	2,057,159	332,340	16,566,076	27,229,405	412,143,589
State contribution for teachers	96,542,150	-	-	-	-	-	-	-	96,542,150
Supplemental employer contributions	445,280	-	-	-	-	-	15,000,000	-	15,445,280
Service credit transfer payments	1,810,490	-	5,549,444	-	-	-	-	-	7,359,934
Interest on service credits purchased	152,432	-	44,273	3,635	-	-	-	-	200,340
Total contributions	504,405,041	1,179,766	71,548,710	5,045,319	3,174,677	449,007	31,566,076	116,432,240	733,800,836
Investment Income									
Net appreciation in fair value of investments	578,626,008	29,432,697	139,063,520	12,115,793	6,288,122	56,413	1,627,486	73,964,816	841,174,855
Interest	41,714,408	2,121,275	10,003,810	869,710	451,376	4,015	118,462	-	55,283,056
Dividends	35,828,524	1,824,473	8,615,903	750,899	389,719	3,414	105,979	958,870	48,477,781
Other investment income	13,083,678	665,360	3,141,376	273,585	141,987	1,261	34,795	669	17,342,711
	669,252,618	34,043,805	160,824,609	14,009,987	7,271,204	65,103	1,886,722	74,924,355	962,278,403
Less investment expense (Note 3)	(15,039,701)	(766,745)	(3,622,587)	(315,975)	(163,996)	(1,434)	(47,930)	-	(19,958,368)
Net investment income	654,212,917	33,277,060	157,202,022	13,694,012	7,107,208	63,669	1,838,792	74,924,355	942,320,035
Miscellaneous revenue	43,137	4	51,557	174	-	-		7,500	102,373
Total Additions	1,158,661,096	34,456,830	228,802,289	18,739,505	10,281,885	512,676	33,404,868	191,364,095	1,676,223,244
Deductions									
Retirement benefits	819,929,757	8,405,649	96,075,721	5,078,677	2,740,166	399,015	17,391,853	-	950,020,837
Death benefits	2,432,232	-	778,333	-	-	-	-	-	3,210,565
Distributions	-	-	-	-	-	-	-	12,298,997	12,298,997
Refund of contributions	5,711,781	266,523	1,425,882	63,301	-	-	-	-	7,467,487
Service credit transfer payments	739,477	-	6,620,457	-	-	-	-	-	7,359,934
Administrative expense (Note 9)	6,394,177	309,283	1,485,182	125,445	65,088	558	-	1,177,819	9,557,552
Total Deductions	835,207,424	8,981,455	106,385,575	5,267,423	2,805,254	399,573	17,391,853	13,476,816	989,915,372
Net Increase	323,453,672	25,475,375	122,416,714	13,472,082	7,476,631	113,103	16,013,015	177,887,279	686,307,872
Net position restricted for pensions									
Beginning of year	5,799,032,677	286,485,058	1,357,876,323	116,316,582	60,418,484	533,525	-	514,246,160	8,134,908,809
End of year	$ 6,122,486,349	$ 311,960,433	$ 1,480,293,037	$ 129,788,664	$ 67,895,115	$ 646,628	$ 16,013,015	$ 692,133,439	$ 8,821,216,681

The accompanying notes are an integral part of this financial statement.

1. System Description and Governance

The Employees' Retirement System of the State of Rhode Island (the System) acts as a common investment and administrative agent for pension benefits to be provided through seven defined benefit retirement plans and one defined contribution plan as listed below:

Plan Name	***Type of Plan***
Employees' Retirement System (*ERS*)	Cost-sharing multiple-employer defined benefit plan
Teachers' Survivors Benefits (*TSB*)	Cost-sharing multiple-employer defined benefit plan
Municipal Employees' Retirement System (*MERS*)	Agent multiple-employer defined benefit plan
State Police Retirement Benefits Trust (*SPRBT*)	Single-employer defined benefit plan
Judicial Retirement Benefits Trust (*JRBT*)	Single-employer defined benefit plan
RI Judicial Retirement Fund Trust *(RIJRFT)*	Single-employer defined benefit plan
RI State Police Retirement Fund Trust (SPRFT)	Single-employer defined benefit plan
Rhode Island Defined Contribution Plan	Defined contribution plan

Each plan's assets are accounted for separately and may be used only for the payment of benefits to the members of that plan, in accordance with the terms of that plan.

The System's financial statements are included as Pension Trust Funds within the Fiduciary Funds in the Comprehensive Annual Financial Report of the State of Rhode Island and Providence Plantations. The accompanying financial statements are not intended to present the financial position and results of operations of the State.

The System is administered by the State of Rhode Island Retirement Board which was authorized, created and established in the Office of the General Treasurer as an independent retirement board to hold and administer, in trust, the funds of the retirement system. The fifteen members of the retirement board are: the general treasurer or his or her designee who shall be a subordinate within the general treasurer's office; the director of administration or his or her designee who shall be a subordinate within the department of administration; a representative of the budget office or his or her designee from within the budget office, who shall be appointed by the director of administration; the president of the league of cities and towns or his or her designee; two (2) active state employee members of the retirement system or officials from state employee unions to be elected by active state employees; two (2) active teacher members of the retirement system or officials from a teachers union to be elected by active teachers; one active municipal employee member of the retirement system or an official from a municipal employees union to be elected by active municipal employees; two (2) retired members of the retirement system to be elected by retired members of the system; and four (4) public members, all of whom shall be competent by training or experience in the field of finance, accounting or pensions; two (2) of the public members shall be appointed by the governor, one of whom shall serve an initial term of three (3) years and one of whom shall serve an initial term of four (4) years and until his or her successor is appointed and qualified; and two (2) of the public members shall be appointed by the general treasurer, one of whom shall serve an initial term of three (3) years and one of whom shall serve an initial term of four (4) years and until his or her successor is appointed and qualified. Thereafter, the term of these four (4) public members shall be for four (4) years or until their successors are appointed and qualified by the Senate.

The System's purpose is to provide retirement benefits to state employees, public school teachers, certain general and public safety municipal employees, state police officers, and judges.

1. System Description and Governance (continued)

A summary of membership by plan follows:

	Retirees and beneficiaries	*Terminated plan members entitled to but not yet receiving benefits*	*Active Vested*	*Active Non-vested*	*Total by Plan*
Actuarial valuation as of June 30, 2016					
ERS					
State Employees	11,058	3,071	8,501	2,582	25,212
Teachers	11,087	3,313	11,038	2,168	27,606
TSB	517	3,685	7,028	-	11,230
MERS					
General Employees	4,561	2,870	4,354	1,528	13,313
Public Safety	773	178	1,138	353	2,442
SPRBT	56	47	39	207	349
JRBT	20	-	14	38	72
RIJRFT	2	-	5	-	7
SPRFT	269	-	-	-	269
Total by type	28,343	13,164	32,117	6,876	80,500

The defined contribution plan at June 30, 2017 included 160 employers and 35,012 plan participants.

2. Plan Membership and Benefit Provisions

Membership and benefit provisions are outlined in the Rhode Island General Laws and are subject to modification by the General Assembly. Modifications to pension benefit and eligibility provisions have been made in recent years as well as the comprehensive pension reform provisions contained in the Rhode Island Retirement Security Act enacted on November 18, 2011 and effective July 1, 2012. Legal challenges to those pension reforms were settled with the final settlement approved by the Court on July 8, 2015. The General Assembly amended the various sections of the General Laws containing those benefit provisions consistent with the terms of the settlement agreement. Those provisions are generally effective beginning July 1, 2015. The benefit provisions for each of the plans as outlined below were those in effect for fiscal 2015. Reference is made in each section to a summary of benefit and contribution provisions that will be in effect for future years.

Accordingly, specific member retirement benefit and eligibility provisions vary depending upon a number of factors including years of service, age, and vesting provisions.

The ERS was established and placed under the management of the Retirement Board for the purpose of providing retirement allowances for employees of the State of Rhode Island under the provisions of chapters 8 to 10, inclusive, of Title 36, and public school teachers under the provisions of chapters 15 to 17, inclusive, of Title 16 of the Rhode Island General Laws.

2. Plan Membership and Benefit Provisions (continued)

EMPLOYEES' RETIREMENT SYSTEM (ERS)

Plan members - The plan covers most State employees other than certain personnel at the State colleges and university (principally faculty and administrative personnel). The plan also covers teachers, including superintendents, principals, school nurses, and certain other school officials in the public schools in the cities and towns. Membership in the plan is mandatory for all covered state employees and teachers. Elected officials may become members on an optional basis and legislators may participate if elected to office prior to January 1, 1995.

Certain employees of the Rhode Island Airport Corporation (hired before July 1, 1993), the Rhode Island Commerce Corporation (active contributing members and employees of the Department of Economic Development before October 31, 1995 who elected to continue membership) and, the Narragansett Bay Water Quality District Commission (members of a collective bargaining unit) are also covered and have the same benefits as State employees.

Plan vesting provisions – after five years of service**.**

Retirement eligibility and plan benefits – are summarized in the following table:

Schedule		Retirement Eligibility	Benefit accrual rates	Maximum benefit
(A)	Completed 10 years of service on or before July, 1, 2005 and eligible to retire as of September 30, 2009	Age 60 with 10 years of service or after 28 years of service at any age	Effective until June 30, 2012: 1.7% for each of first ten years 1.9% for each of next ten years 3.0% for each of next fourteen years 2% for the 35th year Effective July 1, 2012: 1.0% per year through June 30, 2015. Effective July 1, 2015, for members with 20 years of service as of July 1, 2012: 2% per year	80% of final average earnings (3 consecutive highest years)
(AB)	Completed 10 years of service on or before July, 1, 2005 but ineligible to retire as of September 30, 2009	Minimum retirement age of 62 and ten years of service with a downward adjustment of the minimum retirement age based on the years of service credit as of September 30, 2009	Effective until June 30, 2012: Same accrual rates as (A) above to September 30, 2009 and then Schedule B rates (below) thereafter Effective July 1, 2012: 1.0% per year through June 30, 2015. Effective July 1, 2015, for members with 20 years of service as of July 1, 2012: 2% per year	80% of final average earnings (5 consecutive highest years)
(B)	Less than 10 years of service before July 1, 2005 and eligible to retire as of September 30, 2009	Age 65 with 10 years of service or after 29 years of service and age 59	Effective until June 30, 2012: 1.6% for each of first ten years 1.8% for each of next ten years 2.0% for each of next five years 2.25% for each of next five years 2.5% for each of next seven years 2.25% for the 38th year Effective July 1, 2012: 1.0% per year	75% of final average earnings (5 consecutive highest years)

2. Plan Membership and Benefit Provisions (continued)

Schedule		Retirement Eligibility	Benefit accrual rates	Maximum benefit
(B1)	Less than 10 years of service before July 1, 2005 and ineligible to retire as of September 30, 2009	Age 65 with ten years of service, or age 62 with at least 29 years of service with a downward adjustment of the minimum retirement age based on the years of service credit as of September 30, 2009	Same as Schedule B	75% of final average earnings (5 consecutive highest years)
(B2)	Less than 5 years of service as of July 1, 2012	Social Security Retirement Age and 5 years of contributory service	1.6% for each of first ten years Effective July 1, 2012: 1.0% per year	75% of final average earnings (5 consecutive highest years)

Effective July 1, 2015 general employees with more than 20 years of service at July 1, 2012 increased their employee contribution rates to 11% and will participate solely in the defined benefit plan. Members will receive a benefit accrual of 2% per year based on the three or five-year average compensation.

Effective July 1, 2015 employees are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.

State correctional officers may retire at age 50 with 20 years of service. However, if not eligible to retire as of September 30, 2009, the minimum retirement age was modified to 55 with 25 years of service credit for correctional officers and registered nurses at the Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals.

The plan provides for survivor's benefits for service-connected death and certain lump sum death benefits.

Joint and survivor options are available to members. For members with 10 years of service as of July 1, 2005, the Service Retirement Allowance (SRA) Plus option provides for the payment of a larger benefit before the attainment of age sixty-two (62) and a reduced amount thereafter. The reduced amount is equal to the benefit before age sixty-two (62), including cost-of-living increases, minus the member's estimated social security benefit payable at age sixty-two (62).

Vested members that have 10 or more years of contributing service credit on June 30, 2012, may choose to retire at a retirement eligibility date that was calculated as of September 30, 2009, if the member continues to work and make retirement contributions until that date. If the member chooses this option, their retirement benefits will be calculated using the benefit that they have accrued as of June 30, 2012 - members will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.

State employees and public school teachers may retire with a reduced pension benefit if they have 20 years of service credit and they are within five years of their retirement date as prescribed in the Rhode Island Retirement Security Act (RIRSA). The actuarially reduced benefit will be calculated based on how close the member is to their RIRSA eligibility date.

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments **–** The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 yr return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

This COLA is calculated on the first $31,026 for all members and/or beneficiaries of members who retired on or before June 30, 2015. The COLA is calculated on the first $26,098, effective January 1, 2017, for all other members/beneficiaries and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement for all retires other than those entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect. Once the plans achieve 80% funding the COLA limitation will be returned to the $25,855, which will continue to be indexed annually.

Disability retirement provisions **-** the plan also provides nonservice-connected disability benefits after five years of service and service-connected disability pensions with no minimum service requirement. Effective for applications filed after September 30, 2009, accidental disability will be available at 66 2/3% for members who are permanently and totally disabled as determined by the Retirement Board. If the disability is determined to be partial and the member is able to work in other jobs, the benefit will be limited to 50%. Disability benefits are subject to annual review by the Retirement Board.

Other plan provisions **-** Service credit purchases, excluding contribution refund paybacks and military service, requested after June 16, 2009 are calculated at full actuarial cost.

TEACHERS' SURVIVORS BENEFITS (TSB)

Plan members **–** the TSB covers all teachers in 24 school districts who do not participate in Social Security.

Plan vesting provisions – Survivors are eligible for benefits if the member has made contributions for at least six months prior to death or retirement.

Eligibility and plan benefits **-** the plan provides a survivor benefit to public school teachers in lieu of Social Security since not all school districts participate in the plan. The cost of the benefits provided by the plan are two percent (2%) of the member's annual salary up to but not exceeding an annual salary of $9,600; one-half (1/2) of the cost is contributed by the member by deductions from his or her salary, and the other half (1/2) is contributed and paid by the respective school district by which the member is employed. These contributions are in addition to the contributions required for regular pension benefits.

Spouse, parents, family and children's benefits are payable following the death of a member. A spouse shall be entitled to benefits upon attaining the age of sixty (60) years. Children's benefits are payable to the child, including a stepchild or adopted child of a deceased member if the child is unmarried and under the age of eighteen (18) years or twenty-three (23) years and a full-time student, and was dependent upon the member at the time of the member's death. Family benefits are provided if at the time of the member's

2. Plan Membership and Benefit Provisions (continued)

death the surviving spouse has in his or her care a child of the deceased member entitled to child benefits. Parents' benefits are payable to the parent or parents of a deceased member if the member did not leave a widow, widower, or child who could ever qualify for monthly benefits on the member's wages and the parent has reached the age of 60 years, has not remarried, and received support from the member. In January, a yearly cost-of-living adjustment for spouse's benefits is paid and based on the annual social security adjustment.

The TSB plan provides benefits based on the highest salary at the time of retirement of the teacher. Benefits are payable in accordance with the following table:

Highest Annual Salary	Basic Monthly Spouse's or Domestic Partner's Benefit
$17,000 or less	$ 750
$17,001 to $25,000	$ 875
$25,001 to $33,000	$ 1,000
$33,001 to $40,000	$ 1,125
$40,001 and over	$ 1,250

Benefits payable to children and families are equal to the spousal benefit multiplied by the percentage below:

Parent and 1 Child	Parent and 2 or more Children	One Child Alone	Two Children Alone	Three or more Children Alone	Dependent Parent
150%	175%	75%	150%	175%	100%

Cost of Living Adjustments – current eligible members' beneficiaries of the TSB receive the same COLA granted to members of Social Security. There was a .3% increase as of January 1, 2017.

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM (MERS)

The MERS was established under the Rhode Island General Laws and placed under the management of the Retirement Board to provide retirement allowances to employees of municipalities, housing authorities, water and sewer districts, and municipal police and fire persons that have elected to participate.

Plan members – A summary of participating employers is listed below:

Municipalities, housing authorities, water and sewer districts	69
Municipal police and fire departments	47
Total participating units as of the actuarial valuation at June 30, 2016	116

Plan vesting provisions – after five years of service.

Retirement eligibility and plan benefits – For general employees prior to June 30, 2012 the plan provided retirement benefits equal to 2% of a member's final average salary multiplied by the number of years of total service up to a maximum of 75%. Such benefits are available to members at least age 58 with 10 years of service or after 30 years of service at any age. Benefits accrued at June 30, 2012 are protected under the Rhode Island Retirement Security Act until it is exceeded by the member's full years of service credit, including service after June 30, 2012, multiplied by the average of five consecutive years of compensation. Effective July 1, 2012 the retirement age mirrors the Social Security Normal Retirement

2. Plan Membership and Benefit Provisions (continued)

Age not to exceed age 67. Members will receive a benefit accrual of 1.0% per year based on the five-year average compensation.

Effective July 1, 2015 general employees with more than 20 years of service at July 1, 2012 will increase their employee contribution rates to 8.25% (9.25% for units with a cost of living adjustment provision) and will participate solely in the defined benefit plan. Members will receive a benefit accrual of 2% per year based on the three or five-year average compensation.

Effective July 1, 2015 general employees are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.

Joint and survivor options are available. For members with 10 years of service as of July 1, 2005, the Service Retirement Allowance (SRA) Plus option provides for the payment of a larger benefit before the attainment of age sixty-two (62) and a reduced amount thereafter. The reduced amount is equal to the benefit before age sixty-two (62), including cost-of-living increases, minus the member's estimated social security benefit payable at age sixty-two (62).

Prior to June 30, 2012, police and fire personnel may retire at age 55 if they have 10 years of service or after 25 years of service at any age. An option may be elected to provide a 20 year service pension with a benefit equal to 2.5% for each year of service up to a maximum of 75% for police and fire personnel. Benefits are based on the average of the highest three consecutive years' earnings, exclusive of overtime.

From June 30, 2012 to June 30, 2015, retirement age for police and fire personnel is 55 years old with 25 years of total service or for members with five years of service but less than 25 years of service the new retirement age will mirror the Social Security Normal Retirement Age not to exceed 67. Police officers or firefighters, that are at least 45 years old, have 10 or more years of contributing service and are eligible to retire prior to age 52 under the law in effect on June 30, 2012, may retire at age 52. Effective July 1, 2015, police and fire personnel may retire at age 50 with 25 years of service, or any age with 27 years of service. MERS police and fire personnel will contribute 9.00% (10.00% for units with a cost of living adjustment).

As of June 30, 2012, members will continue to have a frozen benefit accrual of 2.0% per year for a standard 25 year with any age and out plan; 2.5% for a standard 20 year with any age and out plan. Effective July 1, 2012 the optional 20 and 25 year with retirement at any age plans have been eliminated. The benefit accrual for all plans will be 2.0% per year based on the five-year average compensation, exclusive of overtime. Police and fire employees may retire with a reduced pension benefit if they have 20 years of service and are within five years of their retirement eligibility. The actuarially reduced benefit will be calculated based on how close the member is to the eligibility date that is prescribed in the Rhode Island Retirement Security Act.

The plan also provides survivor's benefits; and certain lump sum death benefits.

Cost of Living Adjustments – An optional cost-of-living provision may be elected for police and fire personnel and general employees. The Cost of Living Adjustment (COLA) has been suspended for any unit whose funding level is less than 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the funding level of a plan exceeds 80% funded eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

2. Plan Membership and Benefit Provisions (continued)

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 yr return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%. This COLA is calculated on the first $31,026 for all members and/or beneficiaries of members who retired on or before June 30, 2015. Once the plans achieve 80% funding, the COLA limitation will be returned to the $25,855, which will continue to be indexed annually.

This COLA is calculated on the first $26,098, effective January 1, 2017, for all other members/beneficiaries and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement for general employees and until the later of age 50 or three years after retirement for police and fire personnel, other than those entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect.

The actual COLA paid to retirees effective January 1, 2017 within MERS units that had achieved an 80% funding status was .74%. Retirees within 58 MERS units received the COLA.

Disability retirement provisions **-** The plan also provides nonservice-connected disability benefits after 5 years of service; service-connected disability pensions with no minimum service requirement.

STATE POLICE RETIREMENT BENEFITS TRUST (SPRBT)

The State Police Retirement Benefits Trust was established under Rhode Island General Law Section 42-28-22.1 and was placed under the management of the Retirement Board for the purpose of providing retirement allowances to State Police.

Plan members – the plan covers all State Police and Superintendents hired after July 1, 1987.

Retirement eligibility and plan benefits **–** Prior to June 30, 2012 the plan generally provides retirement benefits equal to 50% of final salary after 20 years of service, plus 3.0% of final salary times service in excess of 20 years through 25 years to a maximum of 65% of final salary. Such benefits are available to members after 20 years of service regardless of age. The Superintendent of the State Police will receive 50% of his/her final salary and may retire after attainment of age 60 and 10 years of service.

The General Laws were amended such that any member of the state police, other than the superintendent, who is hired on or after July 1, 2007 and who has served for twenty-five (25) years shall be entitled to a retirement allowance of 50% of the final salary. In addition, any member may serve up to a maximum of 30 years, and shall be allowed an additional amount equal to 3.0% for each completed year served after 25 years to a maximum retirement allowance not to exceed 65% of the final salary.

Benefits are based on the final base salary earned at retirement including longevity increment, holiday pay, clothing allowance and up to 400 overtime hours.

Effective July 1, 2012 state police officers are eligible to retire once they have accrued a retirement benefit equal to 50% of their whole salary, with mandatory retirement once they have accrued a retirement benefit equal to 65% of their whole salary. State police officers will earn a 2% accrual rate for each year of contributing service. Benefits will be calculated on the average of the highest five consecutive years of salary, including up to 400 hours of mandatory overtime service. Benefits accrued as of June 30, 2012 will be protected under the Rhode Island Retirement Security Act.

2. Plan Membership and Benefit Provisions (continued)

Cost of Living Adjustments – the Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 year return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

This COLA is calculated on the first $31,026 for all members and/or beneficiaries of members who retired on or before June 30, 2015. The COLA is calculated on the first $26,098, effective January 1, 2017, for all other members/beneficiaries and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement for all retires other than those entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect. Once the plans achieve 80% funding the COLA limitation will be returned to the $25,855, which will continue to be indexed annually.

Disability retirement provisions - the plan provides nonservice-connected disability benefits after 10 years of service and service-connected disability pensions with no minimum service requirement.

JUDICIAL RETIREMENT BENEFITS TRUST (JRBT)

The Judicial Retirement Benefits Trust was established under Rhode Island General Laws 8-8.2-7; 8-3-16; 8-8-10.1; 28-30-18.1; and was placed under the management of the Retirement Board for the purpose of providing retirement allowances to Justices of the Traffic Tribunal, Supreme, Superior, Family, District and Workers Compensation courts.

Plan members – the plan covers all Judges appointed after December 31, 1989.

Retirement eligibility and plan benefits – are summarized in the following table:

Judges appointed	Retirement benefit
After: December 31, 1989 but before July 2, 1997	75% of the final salary at the time of retirement after 20 years of service, or 10 years of service and attainment of age 65. Judges retiring after 20 years of service after age 65 or 15 years of service after age 70 receive full retirement benefits, which is the final salary at time of retirement.
After: July 2, 1997 but before January 1, 2009	Same as above except, salary is the average highest three (3) consecutive years of compensation rather than final salary.

2. Plan Membership and Benefit Provisions (continued)

Judges appointed	Retirement benefit
After: January 1, 2009 but before July 1, 2009	Judges with 20 years of service after age 65 or judges with 15 years of service after age 70 will receive 90% of the average of the highest three consecutive years of compensation. Judges appointed on or after January 1, 2009 with 10 years of service and age 65 or 20 years of service at any age are entitled to a reduced benefit of 70% of the average highest three consecutive years of compensation. Judges designating a survivor benefit with 20 years of service and age 65 or 15 years of service and age 70 receive a reduced benefit equal to 80% of the average highest three consecutive years of compensation. Judges designating a survivor benefit with 10 years of service after age 65 or 20 years of service at any age receive a reduced benefit equal to 60% of the average highest three consecutive years of compensation.
After: July 1, 2009	Judges with 20 years of service after age 65 or with 15 years of service after age 70 will receive 80% of the average of the highest five consecutive years of compensation. Judges with 10 years of service and age 65 or 20 years of service at any age are entitled to a reduced benefit of 65% of the average highest five consecutive years of compensation. Judges designating a survivor benefit with 20 years of service and age 65 or 15 years of service and age 70 receive a reduced benefit equal to 70% of average highest five consecutive years of compensation. Judges designating a survivor benefit with 10 years of service after age 65 or 20 years of service at any age receive a reduced benefit equal to 55% of average highest five consecutive years of compensation.

Certain survivor benefits are also provided to judges who are plan members, which is 50% of the benefit amount payable to the judicial member.

Cost of Living Adjustments – the Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 yr return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

This COLA is calculated on the first $31,026 for all members and/or beneficiaries of members who retired on or before June 30, 2015. The COLA is calculated on the first $26,098, effective January 1, 2017, for all other members/beneficiaries and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement for all retires other than those entitled to receive a benefit adjustment as of June 30, 2012 under the law then in effect. Once the plans achieve 80% funding the COLA limitation will be returned to the $25,855, which will continue to be indexed annually.

2. Plan Membership and Benefit Provisions (continued)

STATE OF RHODE ISLAND JUDICIAL RETIREMENT FUND TRUST (RIJRFT)

Effective July 1, 2012 and pursuant to Rhode Island General Law section 8-3-16, the retirement board established a trust to collect proceeds for the purpose of paying retirement benefits to participating judges or their beneficiaries.

Plan members – the plan covers seven (7) judges appointed prior to January 1, 1990. These members are active judges (as of June 30, 2012) appointed prior to January 1, 1990 that do not participate in the Judicial Retirement Benefit Trust. Prior to creating the trust, benefits for these members were intended to be funded on a pay-as-you-go basis. To the extent assets in the trust are insufficient to fund member benefits, the State would also fund retirement benefits on a pay-as-you-go basis as it does for sixty-five (65) retired judges and surviving beneficiaries that were not members of either judicial plan. The employee contribution rate is 12% of salary (except for members of the Supreme Court who contribute 8.75%).

Retirement eligibility and plan benefits – The plan generally provides retirement benefits for members who have served as a justice of the supreme court, the superior court, the family court, the district court, for 20 years (or a combination of service in various courts) and has reached the age of 65 years, or has served 15 years, and reached the age of 70 years may retire from regular service and receive a benefit equal to the annual salary the justice was receiving at the time of their retirement. Members of the traffic tribunal who served as a justice for 20 years, or has served for 10 years and reached age 65 years may retire from regular service and receive a benefit equal to 75% of the annual salary at the time of retirement. However, any traffic tribunal judge who has served 20 years and has reached age 65 years, or has served for 15 years and reached age 70 years may retire from active service and receive a benefit equal to annual salary the justice was receiving at the time of their retirement.

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 yr return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

This COLA is calculated on the first $26,098, effective January 1, 2017, and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement.

STATE OF RHODE ISLAND STATE POLICE RETIREMENT FUND TRUST (SPRFT)

Effective June 8, 2016 and pursuant to Rhode Island General Law section 42-28-22.1, the retirement board established a trust to collect proceeds for the purpose of paying retirement benefits to participating members of the state police initially hired on or before July 1, 1987, or their beneficiaries.

The trust was established to reduce the amount of the unfunded liability attributable to the retirement benefits for members of the state police hired on or before July 1, 1987. The trust was funded with monies obtained from the Department of Justice's Equitable Sharing Program, resulting from a settlement involving Google, Inc., in which $45 million of such settlement was allocated for use by the state police.

2. Plan Membership and Benefit Provisions (continued)

Pursuant to Rhode Island General Law section 42-28-22.2, the State shall deposit contributions for the members of the state police initially hired on or before July 1, 1987 to be held in trust. The trust was established with a $15 million supplemental contribution (from funds available to the State from the Department of Justice's Equitable Sharing Program) that was deposited in fiscal 2017. Taking into account the initial supplemental contribution, as certified by the State's actuary, the unfunded actuarial liability will be amortized over an 18 year period. The State will make annual contributions into the trust for this funding period, or until the unfunded accrued liability is fully amortized. This trust is a closed plan because there are no longer any active members.

Plan members – the plan covers members of the state police hired on or before July 1, 1987. Prior to creating the trust, benefits for these members were intended to be funded on a pay-as-you-go basis.

Retirement eligibility and plan benefits – The plan generally provides retirement benefits equal to 50% of final salary after 20 years of service, members that retired after July 1, 1972 could earn an additional 3.0% of final salary times service in excess of 20 years through 25 years to a maximum of 65% of final salary. Such benefits are available to members after 20 years of service regardless of age.

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision will be reviewed in a four-year interval while the plans are less than 80% funded. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 year return – 5.5%, with a max of 4%) and 50% calculated using the percentage increase in the CPI-U from the prior September 30 (max of 3%) for a total maximum COLA of 3.5%.

This COLA is calculated on the first $26,098, effective January 1, 2017, and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement.

DEFINED CONTRIBUTION PLAN

The State of Rhode Island Defined Contribution Retirement Plan (the "Plan") is a defined contribution (money purchase) plan that operates under Section 401(a) of the Internal Revenue Code. The Plan was established under Rhode Island General Law section 36-10.3-2 and was placed under the management of the Retirement Board. The Retirement Board is the Plan administrator and Plan trustee. The law authorizes the State Investment Commission to select the appropriate third-party administrator for the Plan and to adopt Plan, trust, and/or custodial documents subject to certain guidelines outlined in the statute. The State Investment Commission is responsible for implementing the investment policy of the Plan and selecting the investment options available to members. TIAA-CREF serves as record keeper for the Plan and Plan assets are held by J.P. Morgan as investment custodian.

Plan members – The plan covers members of the defined benefit plan within the Employees' Retirement System of Rhode Island with less than 20 years of service as of June 30, 2012, excluding legislators, correction officers, judges, state police, and MERS general police and fire employees who participate in Social Security. For covered employees, participation in the defined contribution plan is mandatory.

2. Plan Membership and Benefit Provisions (continued)

Plan vesting provisions – The total amount contributed by the member, including associated investment gains and losses, shall immediately vest in the member's account and is non-forfeitable. The total amount contributed by the employer, including associated investment gains and losses, vests with the member and is non-forfeitable upon completion of three (3) years of contributory service. Service credit under ERS or MERS prior to July 1, 2012 is credited to the member for vesting purposes.

Member accounts – Each member's account is credited with the member and employer's contribution and an allocation of the plan's earnings. Allocations are based on a relationship of the member's account balance in each investment fund to the total of all account balances in that fund. The retirement benefit to which a member is entitled is the benefit that can be provided from the member's account.

Forfeitures – Non-vested employer contributions are forfeited upon termination of employment. Such forfeitures can be used by employers to offset future remittances to the plan.

Contributions – The plan's benefits are funded by contributions from the participants and the employer, as specified in Rhode Island General Law 36-10.3-4 and 36-10.3-5.

Eligible state employees and teachers and MERS general employees that participate in Social Security contribute 5% of the member's compensation. Teachers and MERS general employees not covered by Social Security must contribute 7% of their compensation.

Employers contribute to these member's individual accounts an amount equal to 1% to 1.5% of the member's compensation depending upon years of service for those participating in Social Security. For eligible members who do not participate in Social Security, the employers contribute an amount equal to 3.0% to 3.5% depending upon years of service.

Investment options – Member and employer contributions may be invested in a variety of investment options broadly diversified with distinct risk and return characteristics. The investment options provide opportunities to diversify across the risk-return spectrum with a range of investment choices within varied asset classes.

The investment programs are managed by TIAA-CREF and have various investment strategies.

Retirement benefits – Benefits may be paid to a member after severance from employment, death, Plan termination, or upon a deemed severance from employment for participants performing qualified military service. At a minimum, retirement benefits must begin no later than April 1 of the calendar year following the year in which you attain age 70 ½ or terminate employment, if later. Members have the option to receive benefit payments in the form of a Single Life Annuity, Two Life Annuity, Lump Sum Benefit, or Installments. These payments are subject to any restrictions in the investment vehicles.

3. Summary of Significant Accounting Policies

These financial statements were prepared in accordance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB). The Governmental Accounting Standards Board (GASB) is responsible for establishing generally accepted accounting principles for defined benefit and defined contribution plans established and administered by governmental entities.

Basis of Accounting - The financial statements of the System are prepared on the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded when incurred.

Cash and Cash Equivalents - Cash represents cash held in trust in a financial institution. Cash equivalents are highly liquid investments with a maturity of three months or less at the time of purchase.

Investments - Investment transactions are recorded on a trade date basis. Gains or losses on foreign currency exchange contracts are included in income consistent with changes in the underlying exchange rates. Dividend income is recorded on the ex-dividend date.

Method Used to Value Investments - Investments are recorded in the financial statements at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Short-term investments are generally carried at cost or amortized cost, which approximates fair value.

The fair value of fixed income securities and domestic and international equity securities is generally based on published market prices and quotations from national security exchanges and securities pricing services. The fair value of mutual fund investments reflects the published closing net asset value as reported by the fund manager.

Commingled funds include institutional domestic equity index and international equity index funds. The fair value of these commingled funds is based on the reported net asset value (NAV) based upon the fair value of the underlying securities or assets held in the fund.

Futures contracts are valued at the settlement price established each day by the board of trade or exchange on which they are traded.

The System also trades in foreign exchange contracts to manage exposure to foreign currency risks. Such contracts are used to purchase and sell foreign currency at a guaranteed future price. The change in the estimated fair value of these contracts, which reflects current foreign exchange rates, is included in the determination of the fair value of the System's investments.

Other investments that are not traded on a national security exchange (primarily private equity, real estate, hedge funds, infrastructure investments, and Crisis Protection Class – Trend Following) are valued based on the reported Net Asset Value (NAV) by the fund manager or general partner. Publicly traded investments held by the partnerships are valued based on quoted market prices. If not publicly traded, the fair value is determined by the general partner following U.S. generally accepted accounting principles. Financial Accounting Standards Board ASC Topic 820, *Fair Value Measurements and Disclosures,* requires the limited partnership general partners for these investment types to value non-publicly traded assets at current fair value, taking into consideration the financial performance of the issuer, cash flow analysis, recent sales prices, market comparable transactions, a new round of financing, a change in economic conditions, and other pertinent information.

3. Summary of Significant Accounting Policies (continued)

Hedge funds, private equity, real estate, infrastructure and crisis protection class – trend following investments represented 9.2%, 7.1%, 7.4%, 3.5%, and 1.0% respectively of the total reported fair value of all ERSRI investments at June 30, 2017.

Investment expenses – Certain investment management expenses are presented separately as a component of net investment income and include investment consultants, custodial fees, direct investment expenses allocated by managers, and allocated Office of the General Treasurer expenses associated with oversight of the portfolio. In some instances (hedge funds, private equity, real estate, infrastructure, and cash investments), investment related costs are not readily separable from investment income and consequently investment income is recorded net of related expenses.

Net investment income within the defined contribution plan is reported on a net-of-fees basis.

Contributions - Plan member contributions for the defined benefit plans are recognized in the period in which the wages, subject to required contributions, are earned for the performance of duties for covered employment. Employer contributions to each defined benefit plan are recognized when due and the employer has made a formal commitment to provide the contributions.

Plan member and employer contributions for the defined contribution plan are contributed to the member's individual account in the plan as a defined percentage of the member's compensation paid during the plan year ending June 30.

Benefits - Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Prepaid Assets – These assets represent the amounts paid to a vendor pursuant to a contract to design, transition, and implement new line-of-business, general ledger accounting system, and payroll administration systems. Under the new system development and operations contract, the vendor will supply and operate the system for the contract period. Consequently, no capital asset related to the new system are recognized or depreciated. The amounts paid before the system became operational have been accounted for as prepaid assets items in prior years. Beginning in fiscal year 2017, when system operations fully commenced, that prepaid amount is amortized ratably over the remaining contract period.

Memorandum Total Columns - Total columns on the financial statements are captioned "memorandum only" to indicate that they are presented only to facilitate financial analysis. Data in these columns are not comparable to a consolidation. Inter-fund eliminations have not been made in the aggregation of this data.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingencies. These estimates are subject to a certain amount of uncertainty in the near term, which could result in changes in the values reported for those assets in the statements of fiduciary net position. Because of the inherent uncertainty in the valuation of privately held securities, the fair value may differ from the values that would have been used if a ready market for such securities existed, and the difference can be material. Estimates also affect the reported amounts of income/additions and expenses/deductions during the reporting period. Actual results could differ from these estimates.

3. Summary of Significant Accounting Policies (continued)

New Accounting Pronouncement – The System implemented GASB Statement No. 82 – *Pension Issues - an amendment of GASB Statements No. 67, No. 68, and No. 73*. This Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements.

4. Cash Deposits and Cash Equivalents

At June 30, 2017, the carrying amounts of the plans' cash deposits are listed below:

Cash Deposits	ERS/TSB	MERS	SPRBT	JRBT	RIRFT	SPRFT	Total
Book Balance	$ 12,858,826	$ 899,072	$ 64,377	$ 547,643	$ 68,476	$ 2,459	$ 14,440,853
Bank Balance	$ 12,918,801	$ 917,046	$ 64,377	$ 547,643	$ 68,476	$ 2,459	$ 14,518,802

The bank and book balances represent the plans' deposits in short-term trust accounts, which include demand deposit accounts and interest-bearing, collateralized bank deposit accounts. The bank balances, include interest-bearing collateralized bank deposits and are either federally insured or collateralized (102%) with U.S. Treasury, agencies, and federal home loan bank letters of credit held by a third party custodian.

In accordance with Rhode Island General Law Chapter 35-10.1, depository institutions holding deposits of the State, its agencies or governmental subdivisions of the State shall, at a minimum, insure or pledge eligible collateral equal to one hundred percent of time deposits with maturities greater than sixty days. Any of these institutions that do not meet minimum capital standards prescribed by federal regulators shall insure or pledge eligible collateral equal to one hundred percent of deposits, regardless of maturity. None of the System's deposits were required to be collateralized at June 30, 2017 (excluding the collateralized interest-bearing deposits). However, the State Investment Commission has adopted a collateralization requirement for institutions holding the State's deposits. Financial institutions are required to pledge collateral equal to 102% of the deposit amounts that are not insured by federal depository insurance.

The General Treasurer makes certain short-term investments on a daily basis. Rhode Island General Law Section 35-10-11 (b)(3) requires that all investments shall be made in securities as would be acquired by prudent persons of discretion and intelligence who are seeking a reasonable income and the preservation of capital.

5. Investments – Pooled Investment Trust

(a). General

The custodian bank holds assets of the System in a Pooled Trust and each plan holds units in the trust. The number of units held by each plan is a function of each plans' respective contributions to, or withdrawals from, the trust.

5. Investments – Pooled Investment Trust (continued)

(a). General

Investment policy - The State Investment Commission (SIC) oversees all investments made by the State of Rhode Island, including those made for the System's Pooled Investment Trust. The establishment of the SIC, its legal authority and investment powers are outlined in Chapter 35-10 of the Rhode Island General Laws.

The SIC has established an asset allocation policy which may be amended by the SIC Board by a majority vote of its members. The SIC's asset allocation policy seeks to achieve the assumed rate of return adopted by the System over the long-term while reducing risk through the prudent diversification of the portfolio across various asset classes.

The following was the SIC's adopted asset allocation policy targets as of June 30, 2017:

Type of Investment	Policy Targets at June 30, 2017
Global Equity	40.0%
Private Growth	15.0%
Income	8.0%
Crisis Protection Class	8.0%
Inflation Protection	8.0%
Volatility Protection	21.0%
Total	100.0%

Consistent with a target asset allocation model adopted by the State Investment Commission (SIC), the System directs its separate-account investment managers to maintain, within the mandate specified by the SIC, diversified portfolios by sector, credit rating and issuer using the prudent person standard, which is the standard of care employed solely in the interest of the participants and beneficiaries of the funds and for the exclusive purpose of providing benefits to participants and defraying reasonable expenses of administering the funds.

Specific manager performance objectives are outlined and generally stated in relation to a benchmark or relevant index. These guidelines also include prohibited investments, limitations on maximum exposure to a single industry or single issuer, a minimum number of holdings within the manager's portfolio and, for fixed income managers, minimum credit quality ratings and duration/maturity targets.

Investment expense is allocated to each plan based on the plan's units in the Pooled Trust at the end of each month.

5. Investments – Pooled Investment Trust (continued)

The following table presents the fair value of investments by type that are held within the Pooled Trust for the defined benefit plans at June 30, 2017:

Pooled Investment Trust Investment Type		**Fair Value**
Cash and Cash Equivalents	$	82,064,035
Money Market Mutual Funds		210,114,008
US Government Securities		699,238,010
US Government Agency Securities		286,192,667
Non-US Government Securities		8,681,897
Collateralized Mortgage Obligations		10,855,746
Corporate Bonds		505,730,965
Domestic Equity Securities		697,965,742
International Equity Securities		471,013,006
Private Equity		569,612,397
Real Estate		593,136,490
Commingled Funds - Domestic Equity		1,304,861,502
Commingled Funds - International Equity		1,224,400,966
Hedge Funds		745,347,110
Crisis Protection Class -Trend Following		77,403,055
Term Loans		323,917,576
Infrastructure		281,746,368
Derivative Investments		644,672
Investments at Fair Value	**$**	**8,092,926,212**
Receivable for investments sold		243,052,508
Payable for investments purchased		(269,621,152)
Total	**$**	**8,066,357,568**

5. Investments – Pooled Investment Trust (continued)

(b) Fair value hierarchy

Investments and Derivative Instruments Measured at Fair Value

Investments at Fair Value	June 30, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Equity Investments				
Global Equity	$ 1,168,978,748	$ 1,168,978,748	$ -	
Infrastructure - publicly traded	154,652,901	154,652,901		
	$ 1,323,631,649	$ 1,323,631,649	$ -	$ -
Fixed Income				
US Government Securities	$ 699,238,010	$ 699,238,010	$ -	$ -
US Government Agency Securities	286,192,667		286,192,667	
Non-US Government Securities	8,681,897		8,681,897	
Corporate Bonds	505,730,965		504,203,696	1,527,268
Collateralized Mortgage Obligations	10,855,746		10,855,746	
Term Loans	323,917,576			323,917,576
	$ 1,834,616,861	$ 699,238,010	$ 809,934,007	$ 325,444,844
Total investments by fair value level	$ 3,158,248,510	$ 2,022,869,660	$ 809,934,007	$ 325,444,844
Investments Measured at Net Asset Value (NAV)				
Money Market Mutual Funds	$ 210,114,008			
Commingled Funds - Domestic Equity	1,304,861,502			
Commingled Funds - International Equity	1,224,400,966			
Hedge Funds	745,347,110			
Private Equity	569,612,397			
Real Estate	593,136,490			
Private Infrastructure	127,093,467			
Crisis Protection Class - Trend Following	77,403,055			
	$ 4,851,968,995			
Derivative Investments				
Equity and fixed income index futures	$ (46,985)	$ (46,985)		
Other derivatives	691,657		$ 691,657	
	$ 644,672			
Cash and cash equivalents	$ 82,064,035			
Net investment payable	$ (26,568,644)			
	$ 8,066,357,568			

5. Investments – Pooled Investment Trust (continued)

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique.

Investments measured at the net asset value (NAV)

	Fair Value	Unfunded Commitments	Redemption (if currently eligible)	Redemption Notice Period
Money Market Mutual Funds(1)	$ 210,114,008	-	daily	none
Commingled Funds - Domestic Equity (2)	1,304,861,502	-	daily	none
Commingled Funds - International Equity (2)	1,224,400,966	-	bi-monthly	see note below
Hedge Funds (3)	745,347,110	-	see note below	see note below
Private Equity (4)	569,612,397	444,854,962	see note below	see note below
Real Estate (5)	593,136,490	76,552,098	see note below	see note below
Infrastructure Investments (6)	127,093,467	43,130,888	see note below	see note below
Crisis Protection Class - Trend Following (7)	77,403,055	-	see note below	see note below
	$ 4,851,968,995	$ 564,537,948		

(1) ***Money market mutual funds*** - these investments are used as temporary cash management investments for amounts pending investment or for amounts liquidated from investments pending distribution for pension benefits. The fair value of these money market funds reflects the net asset value reported by the fund administrator which is a stable $1 per unit. The underlying investments which are short-term cash equivalent type investments are generally carried at amortized cost which approximates fair value. There are no withdrawal limitations for the money market mutual funds.

(2) ***Commingled funds*** – consist of one domestic and three international equity index funds which are intended to replicate the performance of a specific index; e.g., Russell 3000. The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the commingled fund manager which reflects the exchange pricing of the equity holdings within each fund. The international equity commingled funds may only be redeemed at scheduled intervals twice per month. There are no withdrawal limitations for the domestic equity index fund.

(3) ***Hedge funds*** – this portfolio is comprised of 17 limited partnerships divided into two sub-categories: hedged equity and absolute return. Hedged equity funds are designed to benefit from the stock market with considerably less risk. They own stakes in companies they expect to outperform and also sell short stocks that they expect to underperform. Absolute return hedge funds employ strategies that seek to generate long-term returns and mitigate risk, regardless of broader market moves. The funds invest across asset classes, including government bonds, other fixed income securities, equity indexes, commodities, and currencies.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2017. Of the underlying holdings within the hedge funds approximately 73% were valued based on Tier 1 inputs (unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted investments).

5. Investments – Pooled Investment Trust (continued)

The system's investments in hedge funds are generally subject to "lock-up" provisions that limit (subject to certain exceptions) the ability to withdraw amounts previously invested for a period of one to three years after the initial investment. At June 30, 2017, investments totaling $45,834,624 are subject to these withdrawal limitation provisions. The remainder of hedge fund assets is available for redemption on a month-end, quarter-end, semi-annual or annual basis, and is subject to notice periods which vary by fund and range from 2 days to 150 days.

As part of an overall change in asset allocation during fiscal 2017, the State Investment Commission opted to reduce its investment in hedge funds. Approximately, $371 million was received during fiscal 2017 from the System's liquidation of certain hedge funds. At June 30, 2017, approximately $244 million is pending and expected to be received during fiscal 2018. Of the amounts pending distribution to the System, assets totaling $8.6 million are held in three vehicles managing the liquidation of investments held in private securities. Cash will be distributed as investments are sold. An additional $13.7 million represents non-invested, liquid assets to be distributed upon completion of the funds' annual audits.

(4) ***Private equity*** – these 84 limited partnership funds provide the portfolio exposure to private companies through equity and/or debt investments. Private equity fund managers invest in private companies with the goal of enhancing their value over the long-term.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2017.

Private equity – the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(5) ***Real Estate –*** these 14 limited partnerships investments are comprised of two different private real estate equity components, Core and Non-Core, which generally refer to the relative levels of risk in the underlying assets. Core investments include existing, substantially leased, income-producing properties located principally in economically diversified metropolitan areas. Non-Core investments represent those properties and/or investment strategies that require specialized acquisition and management expertise and skill to mitigate the business and leasing risks that may be associated with individual investments. Non-Core investments, which may be referred to as Value Added and Opportunistic investments, are expected to be held for shorter periods, have greater volatility compared to Core investments, and as such, are expected to provide yields higher than those associated with Core investments.

These funds acquire, manage and sell physical properties, including office, retail, apartment, and industrial buildings as well as more niche property types, such as student housing, self-storage and hotels. The primary goals of this asset class are to provide current income, risk-adjusted total returns, and diversification.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2017.

With the exception of five core open-end funds which allow for quarterly redemptions, the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(5) Investments – Pooled Investment Trust (continued)

(6) ***Infrastructure*** – These four funds provide inflation-protection and current income to the portfolio through investments in facilities and services required for an economy to function including electricity production and distribution, pipelines, sewers and waste management, airports, roads, bridges, ports, railroads, telephone and cable networks, and hospitals. The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2017.

With the exception of one open-end core fund which allows for quarterly liquidity, the investments cannot be redeemed. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(7) ***Crisis Protection Class – Trend Following –*** These two funds were created as limited liability companies with the Employees' Retirement System of the State of Rhode Island as the sole member. The investment managers' principal investment objectives for the companies include providing diversified exposure to market trends across asset classes, geographies, and time horizons to generate sizable profits during the periods when growth–risk exposed assets decline significantly and to outperform the Credit Suisse Liquid Alternative Beta Managed Futures Index (CLABT18 Index) over a 5-year period.

The fair values of the investments in this type have been determined using the NAV per share of the investments as reported by the general partner at June 30, 2017. As the Employees' Retirement System of the State of Rhode Island is the sole member, the limited liability company could be liquidated at its option. The nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows.

(c) Rate of Return

For the year ended June 30, 2017, the annual money-weighted returns on investments within each of the plans, net of investment expense, are shown in the following table. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT
Money-weighted rate of return – year ended June 30, 2017	12.34%	11.66%	12.17%	11.87%	11.87%	11.46%	9.79%

(d) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of a debt security's sensitivity to fair value changes arising from changes in the level of interest rates. It is the weighted average maturity of a bond's cash flows. The System manages its exposure to interest rate risk by comparing each fixed income manager portfolio's effective duration against a predetermined benchmark index based on that manager's mandate. The fixed income indices currently used by the System are:

- Barclays US Aggregate Index
- Barclays US Treasury Inflation Notes - 1-10 Year Index
- Custom loan and high yield index – 30% Bank of America Merrill Lynch 1-3 Year BB-B High Yield, 35% JP Morgan BB/B Leveraged Loan Index and 35% Credit Suisse Institutional Leveraged Loan Index

5. Investments – Pooled Investment Trust (continued)

At June 30, 2017, no fixed income manager was outside of the policy guidelines.

The following table shows the System's fixed income investments by type, fair value and the effective duration at June 30, 2017:

Investment Type:	Fair Value (in thousands)	Effective Duration
US Government Securities	$ 699,238	6.31
US Government Agency Securities	286,193	3.50
Non-US Government Securities	8,682	6.59
Collateralized Mortgage Obligations	10,856	0.80
Corporate Bonds	505,731	4.99
Term Loans	323,918	0.18
Total Fixed Income	$ 1,834,617	4.40

The System had investments at June 30, 2017 totaling $210 million in money market mutual fund investments including $111 million in the Ocean State Investment Pool Trust (OSIP), an investment pool established by the State General Treasurer.

OSIP has met the criteria outlined in GASB Statement No. 79 – *Certain External Investment Pools and Pool Participants* to permit election to report its investments at amortized cost which approximates fair value. OSIP transacts with its participants at a stable net asset value (NAV) per share. Investments reported at the NAV are not subject to the leveling categorization as described above. There are no participant withdrawal limitations. The OSIP is not rated and the weighted average maturity of investments held in the pool, by policy, is not to exceed 60 days. OSIP issues a publicly available financial report that can be obtained by writing to the Office of the General Treasurer, Finance Department, 50 Service Avenue - 2nd Floor, Warwick, RI 02886.

The System's remaining money market mutual fund investments consisted of a short-term money market mutual fund that is not rated and held investments with a weighted average maturity of 80 days at June 30, 2017. The fund, by policy, holds only high-grade, highly liquid cash equivalent-type investments.

The System invests in various mortgage-backed securities, such as collateralized mortgage obligations (CMO), interest-only and principal-only strips. They are reported in U.S. Government Agency Securities and Collateralized Mortgage Obligations in the table above. CMO's are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes or tranches in accordance with the CMO's established payment order. Some CMO tranches have more stable cash flows relative to changes in interest rates while others are significantly sensitive to interest rate fluctuations.

5. Investments – Pooled Investment Trust (continued)

The System may invest in interest-only and principal-only strips in part to hedge against a rise in interest rates. Interest-only strips are based on cash flows from interest payments on underlying mortgages. Therefore, they are sensitive to pre-payments by mortgagees, which may result from a decline in interest rates. Principal-only strips receive principal cash flows from the underlying mortgages. In periods of rising interest rates, homeowners tend to make fewer mortgage prepayments.

(e) Credit Risk

The System manages exposure to credit risk generally by instructing fixed income managers to adhere to an overall target weighted average credit quality for their portfolios and by establishing limits on the percentage of the portfolios that are invested in non-investment grade securities. The System's exposure to credit risk as of June 30, 2017 is as follows:

Rating	Collateralized Mortgage Obligations	US Government Agency Securities	Corporate Bonds	Term Loans
Aaa	$ 9,635,336	$ 284,492,002	$ 22,933,344	$ 25,556,409
Aa	1,220,410		33,814,025	3,352,768
A			128,298,096	5,092,194
Baa		1,700,665	247,371,454	12,813,408
Ba			32,648,042	85,989,349
B			28,477,919	119,777,635
Caa			4,697,619	7,562,434
Ca				
C				
D				793,765
Not Rated			7,490,466	62,979,614
Fair Value	$ 10,855,746	$ 286,192,667	$505,730,965	$ 323,917,576

Ratings provided by Moody's Investors Service

(f) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of investments in a single issuer. There is no single issuer exposure within the System's pooled investment trust that comprises 5% of the overall portfolio.

(g) Custodial Credit Risk

For an investment, custodial credit risk is the risk that, in the event of the failure of a counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. At June 30, 2017, all securities were registered in the name of the System (or in the nominee name of its custodial agent) and were held in the possession of the System's custodial bank, Bank of New York Mellon.

5. Investments – Pooled Investment Trust (continued)

(h) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. Portfolios are diversified to limit foreign currency and security risk. The System may enter into foreign currency exchange contracts to minimize the short-term impact of foreign currency fluctuations on foreign investments. The System's exposure to foreign currency risk at June 30, 2017, was as follows:

Foreign Currency	Commingled Fund	Equities	Private Equity	Derivatives	Total
Australian Dollar	$ 52,306,065	$ 27,590,601		$ 16,357	$ 79,913,023
Brazilian Real	23,579,620				23,579,620
Canadian Dollar	100,816,552	39,375,191	3,030,787	4,576	143,227,106
Chilean Peso	3,641,294				3,641,294
Colombian Peso	1,557,277				1,557,277
Czech Republic Koruna	693,196				693,196
Danish Krone	12,259,129	7,405,732			19,664,861
Egyptian Pound	524,563				524,563
Euro Currency	246,640,208	150,521,416	52,691,350	206,760	450,059,734
Great Britain Pound	134,639,642	72,244,266		55,910	206,939,819
Hong Kong Dollar	97,798,611	15,367,413			113,166,025
Hungarian Forint	1,141,843				1,141,843
Indian Rupee	31,147,986				31,147,986
Indonesia Rupiah	8,510,587				8,510,587
Israeli Shekel	1,955,126	1,202,424			3,157,550
Japanese Yen	180,977,892	99,966,453		(53,921)	280,890,424
Malaysian Ringgit	8,305,013				8,305,013
Mexican Peso	13,342,508				13,342,508
New Taiwan Dollar	44,171,100				44,171,100
New Zealand Dollar	1,324,384	858,868			2,183,251
Norwegian Krone	4,890,668	2,413,671			7,304,338
Pakistani Rupee	399,578				399,578
Peruvian Nouveau Sol	5				5
Philippine Peso	4,207,044				4,207,044
Polish Zloty	4,471,736				4,471,736
Qatari Real	2,359,496				2,359,496
Russian Ruble	6,529,222				6,529,222
Singapore Dollar	10,699,658	8,632,814			19,332,472
Swedish Krona	22,180,338	15,517,763		9,897	37,707,999
Swiss Franc	62,700,169	29,916,394			92,616,563
South African Rand	24,253,254				24,253,254
South Korean Won	55,632,813				55,632,813
Thailand Baht	7,533,447				7,533,447
Turkish Lira	3,755,306				3,755,306
United Arab Emirates Dirham	2,228,855				2,228,855
Total	$ 1,177,174,185	$ 471,013,006	$ 55,722,136	$ 239,579	$ 1,704,148,906
United States	49,255,488				
Grand Total	$ 1,226,429,673				

In addition to the foreign currency exposure highlighted in the foregoing table, certain hedge and private equity fund investments may have foreign currency exposure.

5. Investments – Pooled Investment Trust (continued)

(i) Derivatives and Other Similar Investments

Certain of the System's investment managers are allowed to invest in derivative type transactions consistent with the terms and limitations governing their investment objective and related contract specifications. Derivatives and other similar investments are financial contracts whose value depends on one or more underlying assets, reference rates, or financial indices.

The System's derivative investments include forward foreign currency transactions, futures contracts, options, rights, and warrants. The System enters into these transactions to enhance performance, rebalance the portfolio consistent with overall asset allocation targets, gain or reduce exposure to a specific market, or mitigate specific risks.

Forward foreign currency contracts – The System enters into foreign currency exchange contracts to minimize the short-term impact of foreign currency fluctuations on foreign investments. A currency forward is a contractual agreement to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. If not offset by a corresponding position with the opposite currency exposure, these contracts involve risk in excess of the amount reflected in the System's Statements of Fiduciary Net Position. The face or contract amount in U.S. dollars reflects the total exposure the System has in currency contracts. The U.S. dollar value of forward foreign currency contracts is determined using forward currency exchange rates supplied by a quotation service. Losses may arise due to changes in the value of the foreign currency or if the counterparty does not perform under the contract.

Futures contracts – The System uses futures to manage its exposure to the domestic and international equity, money market, and bond markets and the fluctuations in interest rates and currency values. Futures are also used to obtain target market exposures in a cost-effective manner and to narrow the gap between the System's actual cash exposures and the target policy exposures. Using futures contracts in this fashion is designed to reduce (or hedge) the risk of the actual plan portfolio deviating from the policy portfolio more efficiently than by using cash securities. The program is only used to manage intended exposures and asset allocation rebalancing.

Buying futures tends to increase the System's exposure to the underlying instrument. Selling futures tends to decrease the System's exposure to the underlying instrument, or hedge other System investments. Losses may arise due to movements in the underlying or reference markets.

Through commingled funds, the System also indirectly holds derivative type instruments, primarily equity index futures.

The System invests in mortgage-backed securities, which are included in the categories described as collateralized mortgage obligations and U.S. Government Agency Securities. These securities are based on the cash flows from interest and principal payments by the underlying mortgages. As a result, they are sensitive to prepayments by mortgagees, which are likely in declining interest rate environments, thereby reducing the value of these securities.

Additional information regarding interest rate risks for these investments is included in Note 5(d) *Interest Rate Risk*.

5. Investments – Pooled Investment Trust (continued)

The System may sell a security in anticipation of a decline in the fair value of that security or to lessen the portfolio allocation of an asset class. Short sales may increase the risk of loss to the System when the price of a security underlying the short sale increases and the System is obligated to deliver the security in order to cover the position.

The following summarize the System's exposure to specific derivative investments at June 30, 2017.

Investment Derivative Instruments	Change in fair value included in investment income	Fair Value at June 30, 2017	Notional Amount
Fixed income futures - long	$ (105,056)	$ (105,056)	$ 165,330,836
Equity index futures - long	(333,173)	(154,004)	46,650,265
Equity index futures - short	212,074	212,074	(38,423,722)
Credit default swaps	590,373	691,657	
Interest rate swaps	262,233		
Total	$ 626,451	$ 644,671	
Foreign currency forward contracts:			
Pending payable (liability)		$ (84,137)	
Pending receivable (asset)		175,412	
		$ 91,275	

The System is exposed to counterparty risk on foreign currency contracts that are in asset positions. The aggregate fair value of derivative instruments in asset positions at June 30, 2017 was $175,412. This represents the maximum loss that would be recognized if all counterparties failed to perform as contracted. Risk is mitigated by using a continuous linked settlement process.

Credit Default Swaps can be used in the portfolio by the credit manager to either obtain exposure to the high yield market efficiently (i.e. by selling protection) at a similar or better price than what can be obtained in cash bonds, or to hedge the credit risk of the portfolio (i.e. buy protection).

Interest rate swaps can be used to manage interest rate risk and increase returns in the fixed income or term loan portion of the portfolio.

The System executes (through its investment managers) derivative instruments with various counterparties. The credit ratings of these counterparties were Baa2 (Moody's) or better, one counterparty was not rated by Moody's but is rated A+ by Standard and Poor's.

6. Other Investments – Defined Contribution Plan

The State Investment Commission selected various investment options for defined contribution plan participants with the overall objective of offering low-cost, strategic, and long-term oriented investment products. Plan participants can choose one or more of the various options and can change options at any time. Plan participants who do not elect a specific option default to a target date retirement fund consistent with their anticipated Social Security retirement eligibility date.

Investment Type	Fair Value	% of Total	Duration (years)
Annuities			
TIAA Stable Value	$ 8,645,669	1.25%	
TIAA Real Estate - variable annuity	4,445,883	0.64%	
Total	**$ 13,091,553**	**1.89%**	
Fixed Income Funds			
Pimco Real Return Institutional Class	4,680,615	0.68%	7.75
Vanguard Total Bond Market Index Admiral	4,799,331	0.69%	6.14
Total	**$ 9,479,946**	**1.37%**	
Target Retirement Funds			
Vanguard Target Retirement 2010 Trust I	8,406,045	1.21%	
Vanguard Target Retirement 2015 Trust I	38,239,232	5.52%	
Vanguard Target Retirement 2020 Trust I	81,699,874	11.80%	
Vanguard Target Retirement 2025 Trust I	95,469,083	13.79%	
Vanguard Target Retirement 2030 Trust I	100,401,733	14.51%	
Vanguard Target Retirement 2035 Trust I	104,913,192	15.16%	
Vanguard Target Retirement 2040 Trust I	83,768,358	12.10%	
Vanguard Target Retirement 2045 Trust I	62,393,572	9.01%	
Vanguard Target Retirement 2050 Trust I	35,826,286	5.18%	
Vanguard Target Retirement 2055 Trust I	12,421,956	1.79%	
Vanguard Target Retirement 2060 Trust I	1,118,020	0.16%	
Vanguard Target Retirement Income Trust I	2,521,477	0.36%	
Total	**$ 627,178,828**	**90.62%**	
Equity Mutual Funds			
TIAA-CREF International Equity Index Fund Institutional	4,486,475	0.65%	
TIAA-CREF Social Choice Equity Institutional	908,847	0.13%	
Vanguard Institutional Index Fund	18,465,948	2.67%	
Vanguard Emerging Markets Stock Index Fund Admiral	3,491,639	0.50%	
Vanguard Mid-Cap Index Fund Admiral	7,584,571	1.10%	
Vanguard Small Cap Index Fund Admiral	7,445,631	1.08%	
Total	**$ 42,383,113**	**6.12%**	
Total	**$ 692,133,439**	**100.00%**	

The majority (98%) of investments held by participants in the defined contribution plan are target date retirement funds and equity index or fixed income mutual funds. The target retirement date funds provide for diversified portfolios of equities and bonds that become progressively more conservative as the fund's associated target retirement date approaches. Equity index mutual funds replicate the price and yield performance of a particular index.

6. Other Investments – Defined Contribution Plan (continued)

The target retirement date and equity and fixed income mutual funds are priced daily based on the traded prices of the underlying securities held within the funds. There are no withdrawal limitations for these mutual funds. These funds are classified as Level 1 investments (quoted prices in active markets for identical assets) within the fair value hierarchy. Annuities are reported at contract value, which approximates fair value. Annuities held by participants within the defined contribution plan are classified as Level 3 investments (significant unobservable inputs) within the fair value hierarchy.

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. At June 30, 2017, all assets and securities were registered in the name of TIAA-CREF as the Defined Contribution Plan's record keeper for the benefit of plan members and were held in the possession of TIAA-CREF's custodian, J.P. Morgan Bank.

The majority of the defined contribution plan investment options are mutual funds that invest in diversified portfolios of securities including equity and fixed-income investments. For investment options that are solely fixed income, weighted-average maturity or duration have been disclosed as a measure of interest rate risk.

Fixed income mutual funds and variable annuity accounts are subject to interest rate, inflation and credit risks. Target-date retirement mutual funds share the risks associated with the types of securities held by each of the underlying funds in which they invest including equity and fixed income funds. Mutual funds may have exposure to foreign currency risk through investment in non-US denominated securities.

7. Contributions

Contribution requirements for plan members and employers are established pursuant to Rhode Island General Laws. With the exception of the RIJRFT plan, employers are required to contribute at an actuarially determined rate for the defined benefit plans. Employer contributions for the defined contribution plan are prescribed by statute. Plan member contributions for the defined benefit and defined contribution plans are fixed by statute. Member and employer contribution rates are subject to amendment by the General Assembly.

(a). Funding Policy

The funding policies, as set forth in Rhode Island General Law, Section 36-10-2 and 45-21-42 provide for actuarially determined periodic contributions to the plans. The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial liability. The valuation is prepared on the projected benefit basis, under which the present value, at the assumed rate of return (currently 7.0 percent for all plans except the RIJRFT which utilizes a 4.0% assumed rate of return), of each participant's expected benefit payable at retirement or death is determined, based on age, service, gender and compensation.

The employer contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. This method is commonly referred to as the Individual Entry Age Actuarial Cost Method.

7. Contributions (continued)

The unfunded actuarial accrued liability (UAAL) is amortized as a level percent of payroll over a closed period. For underfunded plans, the period is 25 years as measured from June 30, 2010, or 21 years as of the current valuation date for any existing UAAL. Beginning with the June 30, 2014 actuarial valuation, new experience gains and losses for underfunded plans are amortized over individual closed periods of 20 years using the process of "laddering".

Overfunded plans will have an amortization rate calculated using a single base amortized over an open period of 20 years.

(b). Contribution rates

Employer contribution rates for fiscal 2017 for all defined benefit plans were developed based on actuarial valuations performed as of June 30, 2014. Employee contribution rates are statutorily determined.

Rhode Island Judicial Retirement Fund Trust plan is not currently advance funded. Employees make contributions to the plan; however, there are no employer contributions. This plan is for a closed group of individuals and the amortization payment has been calculated based on level-dollar amortization over 17 years from June 30, 2013.

State of Rhode Island State Police Retirement Fund Trust is a closed group of individuals and the annual contributions of $16,387,092 into the Trust have been calculated based on a level-dollar amortization over 18 years from June 30, 2016.

The table below displays the defined benefit plan contribution rates for the year ended June 30, 2017:

Plan	Employee	Employer
ERS		
State Employees	3.75% Members with more than 20 yrs of service at July 1, 2012 – 11%	23.78%
Teachers		
LEA funded	3.75% Members with more than 20 yrs of service at July 1, 2012 – 11%	13.49% (*12.79% for towns not participating in the 1990 early retirement incentive*)
State funded		9.27% (*8.80% for towns not participating in the 1990 early retirement incentive*)
TSB	1% of the member's annual salary up to but not exceeding $9,600	1% of the member's annual salary up to but not exceeding $9,600
MERS		
General Employees	1.00% (additional 1% with a cost-of-living adjustment)	69 Municipalities, housing authorities, water and sewer districts contributed various actuarially determined rates.
Public Safety	7.00% (additional 1% with a cost-of-living adjustment)	47 Municipal police and fire departments contributed various actuarially determined rates.
SPRBT	8.75%	13.43%
JRBT	12.00% (8.75% supreme court judges)	21.30%
RIJRFT	12.00% (8.75% supreme court judges)	$1,240,501 (Note 1)
SPRFT	N/A	$16,387,092 (Note 2)
Note 1 – The State of Rhode Island is not currently funding this plan on an advance funding basis – full actuarially determined employed contributions have not been made to the plan.		
Note 2 – An initial supplemental contribution of $15,000,000 was also made at the beginning of fiscal year 2017.		

7. Contributions (continued)

The table below displays the defined contribution plan contribution rates for the year ended June 30, 2017:

Plan	Employee	Employer
Defined Contribution Plan	Eligible state employees, teachers, and MERS general employees participating in social security – 5%	1% to 1.5% based on years of service
	Teachers and MERS general employees not covered by social security – 7%	3% to 3.5% based on years of service
	MERS police and fire employees not covered by social security – 3%	3%

Effective July 1, 2015, members of the defined contribution plan who had 20 or more years of service as of July 1, 2012, remained as plan participants but no longer contributed to the plan (both employee and employer contributions).

(c). Contributions from Nonemployer Contributing Entity

Within the ERS plan, the State of Rhode Island, as a nonemployer contributing entity, makes a contribution for teachers employed by local educational agencies. This is considered a special funding situation wherein the State, by statute, has assumed responsibility to fund approximately 40% of the annual required employer contribution for teachers.

(d). Supplemental Contributions

The General Laws (Section 36-10-2(e) 1 and 2) also require, in addition to the contributions provided for by the funding policy, for each fiscal year in which the actuarially determined state contribution rate for state employees and teachers, including state contributions to the defined contribution plan, is lower than that for the prior fiscal year, the governor shall include an appropriation to that system equivalent to twenty percent (20%) of the rate reduction to be applied to the actuarial accrued liability. The amounts to be appropriated shall be included in the annual appropriation bill and shall be paid by the general treasurer into the retirement system. The retirement system's actuary shall not adjust the computation of the annual required contribution for the year in which supplemental contributions are received; such contributions once made may be treated as reducing the actuarial liability remaining for amortization in the next following actuarial valuation to be performed. For fiscal 2017, there were no monies contributed to the System in accordance with this provision of the General Laws.

The Retirement Security Act provides for additional contributions to the System based on 5.5% of the value of contracts where the services performed by the contractor were previously performed by state employees. A supplemental contribution of $445,280 was paid to the System pursuant to Section 42-149-3.1 of the General Laws.

8. Net Pension Liability (Asset) of the Participating Employers

The components of the net pension liability of the employers participating in the various plans of the System at June 30, 2017 were as follows:

Plan	Total pension liability	Plan fiduciary net position	Employers' net pension liability (asset)	Plan fiduciary net position as a % of the total pension liability
ERS				
State employees	$ 4,680,841,285	$ 2,426,085,798	$ 2,254,755,487	51.8%
Teachers	6,843,692,866	3,696,400,551	3,147,292,315	54.0%
TSB	229,234,027	311,960,433	(82,726,406)	136.1%
SPRBT	154,274,067	129,788,664	24,485,403	84.1%
JRBT	75,627,725	67,895,115	7,732,610	89.8%
RIJRFT	20,441,696	646,628	19,795,068	3.2%
SPRFT	175,957,019	16,013,015	159,944,004	9.1%
MERS				
General employees	1,235,893,776	970,047,065	265,846,711	78.5%
Police and fire	681,563,797	510,245,970	171,317,827	74.9%

a. Actuarial assumptions

The total pension liability for all defined benefit plans was determined by actuarial valuations performed as of June 30, 2016 and rolled forward to June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement.

The actuarial assumptions used in the calculation of the total pension liability at the June 30, 2017 measurement date were consistent with the 2017 Actuarial Experience Investigation Study for the six-year period ended June 30, 2017 and as approved by the System's Board on May 15, 2017.

8. Net Pension Liability (Asset) of the Participating Employers (continued)

Summary of Actuarial Assumptions

Used in the June 30, 2017 measurement date valuations to determine the Net Pension Liability

	ERS		MERS	SPRBT	JRBT	RIJRFT	TSB	SPRFT
	State Employees	*Teachers*						
Valuation Date	June 30, 2016 valuation rolled forward to the June 30, 2017 measurement date							
Actuarial Cost Method	Entry Age Normal - the Individual Entry Age Actuarial Cost methodology is used.							
Amortization Method	Level Percent of Payroll – Closed					Level Dollar	Level Dollar	Level Dollar
Amortization Period for gains and losses	20 years							
Actuarial Assumptions								
Investment Rate of Return	7.0%	7.0%	7.00%	7.0%	7.0%	3.56%	7.00%	
Projected Salary Increases	3.25% to 6.50%	3.0% to 13.5%	<u>*General Employees*</u> 3.25% to 7.50% <u>*Police & Fire Employees*</u> 4.00% to 14.00%	3.75% to 11.75%	3.50%	3.50%	3.50% to 13.50%	
Inflation	2.5%							
Mortality	Variants of the RP-2014 mortality tables - for the improvement scale, update to the ultimate rates of the MP-2016 projection scale.							

Cost of Living Adjustments – The Cost of Living Adjustment (COLA) has been suspended until the collective ERS, SPRBT, and JRBT plans reach a funded status of 80%. The COLA provision can be reviewed in a four-year interval. When the collective funding level of the plans exceeds 80%, eligible retirees may receive a COLA annually effective on their date of retirement plus one month.

The COLA calculation is represented by the following formula: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5 yr return – 5.5%, with a max of 4%) and 50% calculated using a previous year's CPI-U (max of 3%) for a total maximum COLA of 3.5%. This COLA is calculated on the first $26,098, effective January 1, 2017, and indexed as of that date as well. The indexing formula is run annually regardless of funding level each year. The COLA will be delayed until the later of the Social Security Retirement Age or three years after retirement.

For the TSB plan, a 2.75% COLA is assumed. For all other plans, a COLA of 2.15% is assumed.

8. Net Pension Liability (Asset) of the Participating Employers (continued)

The long-term expected rate of return best-estimate on pension plan investments was determined by the actuary using a building-block method. The actuary started by calculating best-estimate future expected real rates of return (expected returns net of pension plan investment expense and inflation) for each major asset class, based on a collective summary of capital market expectations from 35 sources. The June 30, 2016 expected arithmetic returns over the long-term (20 years) by asset class are summarized in the following table:

Asset Class	Long-Term Target Asset Allocation	Long-Term Expected Arithmetic Real Rate of Return
Global Equity		
US Equity	20.60%	6.85%
International Developed Equity	15.90%	6.71%
Emerging Markets Equity	3.50%	8.91%
Private Growth		
Private Equity	11.30%	9.62%
Non-Core RE	2.20%	5.17%
OPP Private Credit	1.50%	9.62%
Income		
High Yield Infrastructure	1.00%	4.26%
REITS	1.00%	5.17%
Liquid Credit	2.80%	4.26%
Private Credit	3.20%	4.26%
Crisis Protection Class		
Treasury Duration	4.00%	0.83%
Systematic Trend	4.00%	3.81%
Inflation Protection		
Core Real Estate	3.60%	5.17%
Private Infrastructure	2.40%	5.57%
TIPs	1.00%	1.72%
Natural Resources	1.00%	3.98%
Volatility Protection		
IG Fixed Income	11.50%	2.12%
Absolute Return	6.50%	3.81%
Cash	3.00%	0.83%

These return assumptions are then weighted by the target asset allocation percentage, factoring in correlation effects, to develop the overall long-term expected rate of return best-estimate on an arithmetic basis.

b. Discount rate

The discount rate used to measure the total pension liability of the plans was 7.0 percent for all but the RIJRFT plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from the employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

8. Net Pension Liability (Asset) of the Participating Employers (continued)

For the RIJRFT plan, the State has not opted to make actuarially determined employer contributions and based on those assumptions, the pension plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members. Consequently, for the RIJRFT plan, the municipal bond index rate, based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" (3.56% at June 30, 2017) was applied to all periods of projected benefit payments to determine the total pension liability.

c. Sensitivity of the net pension liability (asset) to changes in the discount rate

The following presents the net pension liability (asset) of the employers calculated using the discount rate of 7.0 percent (for all plans except the RIJRFT), as well as what the employers' net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate. The RIJRFT plan's fiduciary net position was not projected to be available to make all projected future benefit payments of current plan members and consequently the municipal bond index rate of 3.56% at June 30, 2017 was used in the determination of the net pension liability for that plan with a similar +1/-1% sensitivity analysis.

	1.00% Decrease (6.0%)	Current Discount Rate (7.0%)	1.00% Increase (8.00%)
ERS - State employees	$ 2,807,740,457	$ 2,254,755,487	$ 1,842,865,329
ERS - Teachers	$ 3,955,394,461	$ 3,147,292,315	$ 2,545,384,802
TSB	$ (56,582,550)	$ (82,726,406)	$ (102,189,847)
SPRBT	$ 42,018,563	$ 24,485,403	$ 11,431,681
JRBT	$ 16,357,790	$ 7,732,610	$ 1,310,561
SPRFT	$ 181,289,870	$ 159,944,004	$ 144,039,190
MERS - General Employees	$ 409,877,632	$ 265,846,711	$ 158,583,230
MERS - Police and Fire	$ 249,173,115	$ 171,317,827	$ 113,350,448

	1.00% Decrease (2.56%)	Municipal Bond Index Discount Rate (3.56%)	1.00% Increase (4.56%)
RIJRFT	$ 22,074,870	$ 19,795,068	$ 18,098,713

9. Administrative Expenses

Pursuant to General Law section 36-8-10.1, administrative costs of the System are financed through investment earnings up to a maximum of 0.175% of the average total investments before lending activities as reported in the annual report of the Auditor General for the next preceding five (5) fiscal years. Such amounts are transferred to a restricted receipt account within the State's general fund. Any unencumbered funds on June 30 of any fiscal year are credited to the plans in the same proportion as their contributions to the restricted receipt account.

9. Administrative Expenses (continued)

Administrative expenses of the System, financed as described in the preceding paragraph, include $1,380,962 of expenses within the Office of General Treasurer related to oversight of the System's investment portfolio. Consistent with generally accepted accounting principles, these expenses have been included with investment expenses on the accompanying financial statements.

For fiscal year 2017, the administrative costs of the defined contribution plan were financed solely by participant fees. Fees paid to TIAA-CREF via participant fees for fiscal year ended June 30, 2017 were $1,177,819. From these participant fees, $140,287 was transferred to the State of Rhode Island to fund the fiscal 2017 operating expenses of the Office of the General Treasurer related to the administration of the defined contribution plan.

10. Commitments

The State Investment Commission has committed to fund certain private equity, real estate, and infrastructure investment managers at a predetermined subscription amount. Outstanding unfunded investment commitments at June 30, 2017 totaled $565 million. These commitments will be funded through cash available within the pooled investment trust generated through investment income and/or liquidation of other investments.

The system's investments in hedge funds are generally subject to "lock-up" provisions that limit (subject to certain exceptions) the ability to withdraw amounts previously invested for a period of one to three years after the initial investment. At June 30, 2017, investments totaling approximately $46 million are subject to these withdrawal limitation provisions. The remainder of hedge fund assets are available for redemption either on a month end or quarter end basis, and are subject to notice periods which vary by fund and range from 2 days to 90 days.

The System is committed under a ten-year development and operating agreement to design, transition, and implement new line-of-business, general ledger accounting system, and payroll administration systems. The contract requires monthly payments through fiscal 2025. Total payments over the contract period are estimated at $22 million.

11. Postemployment Healthcare Plan

Plan Description - The System contributes to the State Employees' defined benefit post-employment health care plan, a cost sharing multiple employer plan administered through the Rhode Island State Employees' and Electing Teachers OPEB System (OPEB System). The State of Rhode Island OPEB Board (Board) was authorized, created and established under Chapter 36-12.1 of the RI General Laws. The Board was established to independently hold and administer, in trust, the funds of the OPEB system. The plan provides medical benefits to certain retired employees of participating employers included in the System.

Pursuant to legislation enacted by the General Assembly, a trust was established to accumulate assets and pay benefits and other costs associated with the OPEB system.

The OPEB system issues a stand-alone, publicly available financial report that includes the financial statements and required supplementary information. A copy of the report can be obtained from the Office of Accounts and Control, One Capitol Hill, Providence, RI 02903.

11. Postemployment Healthcare Plan (continued)

Funding Policy - RIGL Sections 36-12.1, 36-12-2.2, and 36-12-4 govern the provisions of the OPEB system. The contribution requirements of plan members, the State, and other participating employers are established and may be amended by the General Assembly. Active employees make no contribution to the OPEB plan. Employees who retired after October 1, 2008 must contribute 20% of the annual estimated benefit cost (working rate) or annual premium for Medicare supplemental coverage.

Employees retiring before October 1, 2008 have varying co-pay percentages ranging from 0% to 50% based on age and years of service at retirement. Further information about the contributions of plan members can be found in the financial report of the OPEB system.

All participating employers are required by law to fund the actuarially determined annual required contribution (ARC), which for fiscal year 2017 was 6.75% of covered payroll. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

The System's contribution to the plan for the years ended June 30, 2017, 2016 and 2015 were $204,768, $186,988, and $205,392 respectively, which represents 100% of the annual required contributions.

12. Related Parties

The State Investment Commission, which sets investment policy and oversees the investments of the System, created two limited liability companies to account for assets invested by managers within its Crisis Protection Class – Trend Following. The Employees' Retirement System of the State of Rhode Island is the sole equity member in each of the limited liability companies. The System's investment in the limited liability companies is reported at the net asset value of the limited liability company based on independently audited financial statements as of and for the year ended June 30.

13. Contingencies

Legal Challenges to Pension Reform

The 2009, 2010 and 2011 legislative pension reforms have resulted in numerous lawsuits against the State brought by current and retired employees, as well as their unions. These lawsuits, some of which are still pending, are described below. The State is vigorously defending any liability in all pending pension reform litigation.

In May of 2010, a number of unions representing State employees and teachers filed a lawsuit in the State's superior court (the "Superior Court") challenging the pension reform legislation enacted by the General Assembly in 2009 and 2010. In June of 2012, certain unions, active employees, retired State employees and associations of retired State and municipal employees who maintain they are current beneficiaries of ERSRI filed five separate lawsuits in Superior Court challenging the RIRSA. In April of 2014, a seventh lawsuit was filed in Superior Court by certain individual retired State workers and teachers. In September of 2014, the Cranston Firefighters, IAFF Local 1363, AFL-CIO and the International Brotherhood of Police Officers, Local 201 (Cranston Police), which had been parties to the 2012 lawsuit challenging RIRSA, withdrew from the original lawsuit and each filed separate lawsuits in Superior Court challenging RIRSA, resulting in nine lawsuits overall. These nine lawsuits were ultimately consolidated.

13. Contingencies (continued)

In March of 2015, the Superior Court entered an order appointing a Special Master, tasking him with certain duties, including "addressing all discovery issues, motions, and assisting the parties in narrowing and/or resolving disputed issues by agreement, subject to further approval by the Court." In April of 2015, the Special Master presented an interim report to the Superior Court stating that a settlement has been reached in five of the nine consolidated pension cases. The Special Master reported that the proposed settlement would impact 58,901 employees. A class action was filed for settlement purposes and in June of 2015, the Superior Court issued its decision approving the proposed settlement. The General Assembly passed legislation to carry out the settlement, which was enacted into law on June 30, 2015 ("New RIRSA"), and the Superior Court entered final judgments in July of 2015. The employees that are members of the unions that brought the non-settled consolidated cases will receive the same benefits afforded to the settling parties.

In July of 2015, the State moved to dismiss three of the remaining six cases – *Cranston Firefighters, IAFF Local 1363, AFL-CIO v. Chafee*; *International Brotherhood of Police Officers, Local 301, AFL-CIO v. Chafee* and *City of Cranston Police Officers, International Brotherhood of Police Officers, Local 301, AFL- CIO v. Chafee* – for lack of justiciability on the grounds that because RIRSA was amended by New RIRSA, the plaintiffs' claims were moot. The Superior Court granted the motion and dismissed the three cases without prejudice.

Nine appeals from two of the July 2015 judgments were filed with the State's Supreme Court (the "Supreme Court"). The appeals do not affect the implementation of New RIRSA. Three of the nine appeals have been dismissed by the Supreme Court. The six remaining appeals are pending before the Supreme Court.

In March of 2016, Cranston Firefighters, IAFF Local 1363, AFL-CIO and International Brotherhood of Police Officers, Local 301, AFL-CIO jointly filed a new lawsuit in the United States District Court for the District of Rhode Island captioned *Cranston Firefighters, IAFF Local 1363, AFL-CIO, et al. v. Raimondo, et al.* In that case, the Cranston police and firefighters' unions claim that RIRSA and New RIRSA violate the Contracts Clause, Takings Clause and Due Process Clause of the United States Constitution. They also seek a declaration concerning the effect of the class action settlement on Cranston police and firefighter retirees. In March of 2017, the District Court granted the State's motion to dismiss all counts in the plaintiffs' complaint. The plaintiffs subsequently filed an appeal with the United States Court of Appeals for the First Circuit, which has been briefed and argued and is pending decision. Notably, the employees represented by the plaintiff unions are municipal employees for which the State would not have funding responsibility.

In addition to the foregoing cases, in September 2014, another case challenging RIRSA was commenced by the Rhode Island State Troopers Association and Rhode Island State Troopers Association *ex rel.* Kevin M. Grace and Ernest E. Adams in Superior Court. The State has answered the complaint in that action, which remains pending. There is no trial date set. The State intends to vigorously defend this lawsuit.

14. Subsequent events

Teachers' Survivors Benefit Plan - subsequent to June 30, 2017 the General Laws were amended to increase survivor benefits to spouses/domestic partners by 10% and increase the payroll base for contributions from $9,600 to $11,500 per year (increasing contributions from $96 to $115 for both employee and employer).

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Required Supplementary Information

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Schedules of Investment Returns

Schedules of Employer and Other Nonemployee Entity Contributions

Notes to Required Supplementary Information

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability

Employees' Retirement System Plan

	2017		2016		2015		2014	
	State Employees	**Teachers**	**State Employees**	**Teachers**	**State Employees**	**Teachers**	**State Employees**	**Teachers**
Total Pension Liability								
Service Cost	$ 58,715,260	$ 79,219,202	$ 59,017,905	$ 78,445,027	$ 58,003,597	$ 73,780,964	$ 56,795,525	$ 73,917,744
Interest	320,346,656	471,638,608	320,857,388	471,001,292	312,489,666	457,901,918	309,695,399	454,525,784
Benefit Changes	-	-			102,727,033	148,006,628		
Differences between expected and actual experience	(6,891,246)	(29,762,014)	(48,986,533)	$ (50,843,400)	(28,729,479)	(20,696,669)		
Changes of assumptions	235,517,482	318,950,799			-	-	(23,761,746)	(98,423,775)
Benefit payments	(337,555,977)	(490,517,793)	(337,538,418)	(490,467,141)	(329,318,255)	(482,865,966)	(330,357,881)	(483,854,062)
Net change in Total Pension Liability	$ 270,132,175	$ 349,528,802	$ (6,649,658)	$ 8,135,778	115,172,562	176,126,875	12,371,297	(53,834,309)
Total pension liability - beginning	4,410,709,110	6,494,164,064	4,417,358,768	6,486,028,286	4,302,186,206	6,309,901,411	4,289,814,909	6,363,735,720
Total pension liability - ending	$ 4,680,841,285	$ 6,843,692,866	$ 4,410,709,110	$ 6,494,164,064	$ 4,417,358,768	$ 6,486,028,286	$ 4,302,186,206	$ 6,309,901,411
Plan Fiduciary Net Position								
Employer contributions	$ 176,093,310	$ 233,828,518	$ 159,534,421	$ 225,569,556	$ 155,901,921	$ 217,902,736	$ 151,660,705	$ 197,869,704
Employee contributions	41,537,793	50,071,218	41,021,592	49,502,952	28,477,668	36,470,893	28,105,658	36,306,239
Net investment income	259,237,475	394,975,442	(3,122,838)	(4,788,264)	57,417,358	88,131,991	340,085,721	522,960,223
Benefit payments	(337,555,977)	(490,517,793)	(337,538,418)	(490,467,141)	(329,318,255)	(482,865,966)	(330,357,881)	(483,854,062)
Transfers of member contributions							303,014	(290,471)
Administrative expenses	(2,533,747)	(3,860,429)	(2,259,017)	(3,463,764)	(2,394,922)	(3,676,564)	(2,234,676)	(3,436,330)
Transfers to affiliated systems	680,142	390,872	(252,093)	252,093	(107,668)	145,179		
Other	180,663	926,185	132,016	955,508	673,125	1,016,295	182,841	129,791
Net change in fiduciary net position	$ 137,639,659	$ 185,814,013	$ (142,484,337)	$ (222,439,060)	$ (89,350,773)	$ (142,875,436)	$ 187,745,382	$ 269,685,094
Plan Fiduciary net position - beginning	$ 2,288,446,139	$ 3,510,586,538	$ 2,430,930,476	$ 3,733,025,598	$ 2,520,281,249	$ 3,875,901,034	$ 2,332,535,867	$ 3,606,215,939
Plan Fiduciary net position - ending	$ 2,426,085,798	$ 3,696,400,551	$ 2,288,446,139	$ 3,510,586,538	$ 2,430,930,476	$ 3,733,025,598	$ 2,520,281,249	$ 3,875,901,033
Net Pension Liability	$ 2,254,755,487	$ 3,147,292,315	$ 2,122,262,971	$ 2,983,577,526	$ 1,986,428,292	$ 2,753,002,688	$ 1,781,904,957	$ 2,434,000,378
Plan Fiduciary Net Position as a percentage of the total pension liability	51.8%	54.0%	51.9%	54.1%	55.0%	57.6%	58.6%	61.4%
Covered Employee payroll	$ 683,530,388	$ 1,010,449,004	$ 671,420,995	$ 980,562,840	$ 669,787,489	$ 966,985,115	$ 653,573,357	$ 951,322,312
Net pension liability as a percentage of covered employee payroll	329.9%	311.5%	316.1%	304.3%	296.6%	284.7%	272.6%	255.9%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Teachers' Survivors Benefits Plan

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 2,154,632	$ 2,151,235	$ 2,134,663	$ 2,193,930
Interest	15,439,481	14,803,900	12,500,416	11,958,890
Benefit Changes	19,564,182		-	-
Differences between expected and actual experience	(23,870,746)		24,212,282	-
Changes of assumptions	15,500,130		-	-
Benefit payments	(8,672,172)	(8,292,668)	(7,992,381)	(7,622,990)
Net change in Total Pension Liability	20,115,507	8,662,467	30,854,980	6,529,830
Total pension liability - beginning	209,118,520	200,456,053	169,601,073	163,071,243
Total pension liability - ending	$ 229,234,027	$ 209,118,520	$ 200,456,053	$ 169,601,073
Plan Fiduciary Net Position				
Employer contributions	$ 589,883	$ 642,276	$ 603,388	$ 609,168
Employee contributions	589,883	642,276	603,388	609,168
Net investment income	33,277,060	(51,004)	6,951,465	39,657,338
Benefit payments	(8,672,172)	(8,292,668)	(7,992,381)	(7,622,990)
Administrative expenses	(309,283)	(267,475)	(276,010)	(260,585)
Other	5	(1)		
Net change in fiduciary net position	$ 25,475,376	$ (7,326,596)	$ (110,150)	$ 32,992,099
Plan Fiduciary net position - beginning	$ 286,485,057	$ 293,811,653	$ 293,921,803	$ 260,929,704
Plan Fiduciary net position - ending	$ 311,960,433	$ 286,485,057	$ 293,811,653	$ 293,921,803
Net Pension Liability (Asset)	$ (82,726,406)	$ (77,366,537)	$ (93,355,600)	$ (124,320,730)
Plan Fiduciary Net Position as a percentage of the total pension liability (asset)	136.1%	137.0%	146.6%	173.3%
Covered Employee payroll	$ 538,657,952	$ 581,414,779	$ 561,753,409	$ 563,134,080
Net pension liability (asset) as a percentage of covered employee payroll	-15.4%	-13.3%	-16.6%	-22.1%

See notes to required supplementary information.

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EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability

State Police Retirements Benefits Trust Plan

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 4,497,800	$ 4,316,597	$ 4,198,214	$ 5,121,964
Interest	9,392,637	9,057,956	8,540,146	7,767,937
Benefit Changes	-	-	1,169,580	-
Differences between expected and actual experience	10,693,999	(4,139,122)	(3,522,114)	-
Changes of assumptions	9,274,363		-	(364,277)
Benefit payments	(5,141,978)	(4,585,258)	(2,496,511)	(1,767,304)
Net change in Total Pension Liability	28,716,821	4,650,173	7,889,315	10,758,320
Total pension liability - beginning	125,557,246	120,907,073	113,017,758	102,259,438
Total pension liability - ending	$ 154,274,067	$ 125,557,246	$ 120,907,073	$ 113,017,758
Plan Fiduciary Net Position				
Employer contributions	$ 2,980,219	$ 4,004,656	$ 3,432,359	$ 3,330,889
Employee contributions	2,059,884	2,034,676	1,731,585	2,033,664
Net investment income	13,694,012	58,578	2,655,869	14,124,238
Benefit payments	(5,141,978)	(4,585,258)	(2,496,511)	(1,767,304)
Administrative expenses	(125,445)	(102,053)	(99,782)	(83,318)
Other	5,390	390	3,694	5,421
Net change in fiduciary net position	$ 13,472,082	$ 1,410,989	$ 5,227,214	$ 17,643,590
Plan Fiduciary net position - beginning	$ 116,316,582	$ 114,905,593	$ 109,678,379	$ 92,034,791
Plan Fiduciary net position - ending	$ 129,788,664	$ 116,316,582	$ 114,905,593	$ 109,678,381
Net Pension Liability	$ 24,485,403	$ 9,240,664	$ 6,001,480	$ 3,339,377
Plan Fiduciary Net Position as a percentage of the total pension liability	84.1%	92.6%	95.0%	97.0%
Covered Employee payroll	$ 22,727,638	$ 20,984,917	$ 19,700,678	$ 23,051,144
Net pension liability as a percentage of covered employee payroll	107.7%	44.0%	30.5%	14.5%

See notes to required supplementary information.

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EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
REQUIRED SUPPLEMENTARY INFORMATION
Schedules of Changes in the Participating Employers' Net Pension Liability
Judicial Retirement Benefits Trust Plan

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 3,000,728	$ 2,858,682	$ 3,024,124	$ 3,001,985
Interest	5,031,124	4,743,701	4,540,604	4,133,613
Benefit Changes	-	-	252,965	-
Differences between expected and actual experience	(1,788,628)	(1,205,744)	(2,857,295)	-
Changes of assumptions	5,173,300		-	(671,723)
Benefit payments	(2,740,166)	(2,530,567)	(1,808,864)	(1,631,368)
Net change in Total Pension Liability	8,676,358	3,866,072	3,151,534	4,832,507
Total pension liability - beginning	66,951,367	63,085,295	59,933,761	55,101,254
Total pension liability - ending	$ 75,627,725	$ 66,951,367	$ 63,085,295	$ 59,933,761
Plan Fiduciary Net Position				
Employer contributions	2,057,159	$ 2,410,039	$ 2,709,397	$ 2,543,510
Employee contributions	1,117,518	1,052,902	1,120,609	1,092,790
Net investment income	7,107,208	28,787	1,367,527	7,220,592
Benefit payments	(2,740,166)	(2,530,567)	(1,808,864)	(1,631,368)
Administrative expenses	(65,088)	(52,548)	(51,039)	(42,538)
Other	(1)	(1)		
Net change in fiduciary net position	$ 7,476,630	$ 908,612	$ 3,337,630	$ 9,182,986
Plan Fiduciary net position - beginning	$ 60,418,485	$ 59,509,873	$ 56,172,243	$ 46,989,257
Plan Fiduciary net position - ending	$ 67,895,115	$ 60,418,485	$ 59,509,873	$ 56,172,243
Net Pension Liability	$ 7,732,610	$ 6,532,882	$ 3,575,422	$ 3,761,518
Plan Fiduciary Net Position as a percentage of the total pension liability	89.8%	90.2%	94.3%	93.7%
Covered Employee payroll	$ 9,532,174	$ 8,981,094	$ 9,570,014	$ 9,314,258
Net pension liability as a percentage of covered employee payroll	81.1%	72.7%	37.4%	40.4%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability

Rhode Island Judicial Retirement Fund Trust Plan

	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 349,593	$ 466,046	$ 416,208	$ 497,532
Interest	615,782	719,311	673,131	709,876
Benefit Changes	-	-	-	-
Differences between expected and actual experience	(1,090,142)		(642,370)	1,617,560
Changes of assumptions	(665,634)	1,865,123	858,970	(1,159,812)
Benefit payments	(399,015)	(231,176)	-	-
Net change in Total Pension Liability	(1,189,416)	2,819,304	1,305,939	1,665,156
Total pension liability - beginning	21,631,112	18,811,808	17,505,869	15,840,713
Total pension liability - ending	$ 20,441,696	$ 21,631,112	$ 18,811,808	$ 17,505,869
Plan Fiduciary Net Position				
Employer contributions	$ 332,340	$ 140,141	$ -	$ -
Employee contributions	116,667	135,454	158,718	153,145
Net investment income	63,669	3,869	9,094	12,045
Benefit payments	(399,015)	(231,176)	-	-
Administrative expenses	(558)	(361)	(239)	(77)
Other	-	1		
Net change in fiduciary net position	$ 113,103	$ 47,928	$ 167,573	$ 165,113
Plan Fiduciary net position - beginning	$ 533,525	$ 485,597	$ 318,024	$ 152,910
Plan Fiduciary net position - ending	$ 646,628	$ 533,525	$ 485,597	$ 318,023
Net Pension Liability	$ 19,795,068	$ 21,097,587	$ 18,326,211	$ 17,187,846
Plan Fiduciary Net Position as a percentage of the total pension liability	3.2%	2.5%	2.6%	1.8%
Covered Employee payroll	$ 988,110	$ 963,703	$ 1,320,875	$ 1,276,208
Net pension liability as a percentage of covered employee payroll	2003.3%	2189.2%	1387.4%	1346.8%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability

Rhode Island State Police Retirement Fund Trust Plan

	2017
Total Pension Liability	
Service Cost	$ -
Interest	12,588,781
Benefit Changes	-
Differences between expected and actual experience	-
Changes of assumptions	4,213,754
Benefit payments	(17,391,853)
Net change in Total Pension Liability	(589,318)
Total pension liability - beginning	176,546,337
Total pension liability - ending	$ 175,957,019
Plan Fiduciary Net Position	
Employer contributions	31,566,076
Employee contributions	-
Net investment income	1,838,792
Benefit payments	(17,391,853)
Administrative expenses	-
Other	-
Net change in fiduciary net position	$ 16,013,015
Plan Fiduciary net position - beginning	-
Plan Fiduciary net position - ending	$ 16,013,015
Net Pension Liability	$ 159,944,004
Plan Fiduciary Net Position as a percentage of the total pension liability	9.1%
Covered Employee payroll	-
Net pension liability as a percentage of covered employee payroll	-

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Changes in the Participating Employers' Net Pension Liability (Asset)

Municipal Employees' Retirement System Plan

	2017		2016		2015		2014	
	General employees	Police & Fire	General employees	Police & Fire	General employees	Police & Fire	General employees	Police & Fire
Total Pension Liability								
Service Cost	$ 21,557,479	$ 18,945,916	$ 20,993,576	$ 17,716,756	$ 20,454,038	$ 15,802,260	$ 20,534,252	$ 15,425,188
Interest	83,854,464	44,876,752	82,527,045	42,922,588	79,553,219	39,209,010	77,208,696	36,969,722
Benefit Changes	-	-			18,678,454	20,243,581	-	-
Differences between expected and actual experience	(1,116,817)	6,573,580	(14,594,497)	(9,510,635)	(10,829,976)	(2,598,079)	-	-
Changes of assumptions	60,394,231	35,347,395					893,569	(4,665,819)
Benefit payments	(72,152,762)	(26,127,177)	(70,865,501)	(25,248,345)	(66,083,440)	(22,950,990)	(66,801,709)	(22,501,480)
Net change in Total Pension Liability	92,536,595	79,616,466	18,060,623	25,880,364	41,772,295	49,705,782	31,834,808	25,227,611
Total pension liability - beginning	1,143,357,181	601,947,331	1,125,296,558	576,066,967	1,083,524,263	526,361,185	1,051,689,455	501,133,574
Total pension liability - ending	$ 1,235,893,776	$ 681,563,797	$ 1,143,357,181	$ 601,947,331	$ 1,125,296,558	$ 576,066,967	$ 1,083,524,263	$ 526,361,185
Plan Fiduciary Net Position								
Employer contributions	$ 31,686,825	$ 16,855,985	$ 30,300,536	$ 16,296,479	$ 28,763,340	$ 15,588,547	$ 26,704,092	$ 11,193,028
Employee contributions	7,332,568	10,079,595	7,244,745	9,561,530	4,368,524	7,223,947	4,333,503	6,979,451
Net investment income	103,015,529	54,186,494	24,225	(156,872)	21,923,799	10,703,150	126,156,827	59,474,454
Benefit payments	(72,152,762)	(26,127,177)	(70,865,501)	(25,248,345)	(66,083,440)	(22,950,990)	(66,801,709)	(22,501,480)
Transfers of member contributions					-	-	(85,962)	73,422
Administrative expenses	(973,249)	(511,933)	(1,178,758)	(427,823)	(878,056)	(425,478)	(789,990)	(372,429)
Transfers to affiliated systems	(272,164)	(798,852)	312,940	(312,936)	(48,286)	10,774	-	-
Other	26,504	69,347	34,888	66,307	262,213	21,917	62,117	23,960
Net change in fiduciary net position	$ 68,663,251	$ 53,753,459	$ (34,126,925)	$ (221,660)	$ (11,691,906)	$ 10,171,867	$ 89,578,878	$ 54,870,406
Plan Fiduciary net position - beginning	901,383,814	456,492,511	$ 935,510,739	$ 456,714,171	$ 947,202,645	$ 446,542,304	$ 857,623,766	$ 391,671,897
Plan Fiduciary net position - ending	$ 970,047,065	$ 510,245,970	$ 901,383,814	$ 456,492,511	$ 935,510,739	$ 456,714,171	$ 947,202,644	$ 446,542,303
Net Pension Liability (Asset)	$ 265,846,711	$ 171,317,827	$ 241,973,367	$ 145,454,820	$ 189,785,819	$ 119,352,796	$ 136,321,619	$ 79,818,882
Plan Fiduciary Net Position as a percentage of the total pension liability	78.5%	74.9%	78.8%	75.8%	83.1%	79.3%	87.4%	84.8%
Covered Employee payroll	$ 244,466,993	$ 102,020,230	$ 233,474,157	$ 96,737,235	$ 228,189,238	$ 91,293,039	$ 223,124,242	$ 88,783,926
Net pension liability (asset) as a percentage of covered employee payroll	108.7%	167.9%	103.6%	150.4%	83.2%	130.7%	61.1%	89.9%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

Schedules of Investment Returns

Annual Money-Weighted Rate of Return, Net of Investment Expense

	ERS	TSB	MERS	SPRBT	JRBT	RIJRFT	SPRFT
Fiscal Year Ended June 30, 2017	12.34%	11.66%	12.17%	11.87%	11.87%	11.46%	9.79%
Fiscal Year Ended June 30, 2016	-0.78%	-0.15%	-0.57%	-0.07%	-0.03%	-1.72%	-
Fiscal Year Ended June 30, 2015	2.06%	2.25%	2.22%	2.28%	2.27%	2.28%	-
Fiscal Year Ended June 30, 2014	15.32%	15.25%	15.12%	14.99%	14.99%	5.61%	-

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

The SPRFT trust plan was created in fiscal 2017.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Employees' Retirement System Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution		Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
State employees						
2017	$ 176,093,310	$ 176,093,310		-	$ 683,530,388	25.34%
2016	159,534,421	159,534,421		-	671,420,995	23.64%
2015	155,901,921	155,901,921		-	669,787,489	23.33%
2014	151,077,142	151,077,142		-	653,573,357	23.12%
Teachers						
2017	$ 233,828,517	$ 233,828,517	*	-	$ 1,010,449,004	23.13%
2016	225,569,556	225,569,556	*	-	980,562,840	23.14%
2015	217,902,736	217,902,736	*	-	966,985,115	22.60%
2014	197,869,704	197,869,704	*	-	951,322,312	20.80%

See notes to required supplementary information.

** includes contributions by the State of Rhode Island as the nonemployer contributing entity.*

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Teachers' Survivors Benefits Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	-	$ 589,883	$ (589,883)	$ 538,657,952	0.11%
2016	-	642,276	(642,276)	581,414,779	0.11%
2015	-	603,388	(603,388)	561,753,409	0.11%
2014	-	609,618	(609,618)	563,134,080	0.11%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

State Police Retirement Benefits Trust Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 2,980,219	$ 2,980,219	-	$ 22,727,638	12.66%
2016	4,004,656	4,004,656	-	20,984,917	17.22%
2015	3,432,359	3,432,359	-	19,700,678	17.24%
2014	3,330,889	3,330,889	-	23,051,144	14.45%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

Schedules of Employer and Other Nonemployer Entity Contributions

Judicial Retirement Benefits Trust Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 2,057,159	$ 2,057,159	-	$ 9,532,174	21.58%
2016	2,410,039	2,410,039	-	8,981,094	26.80%
2015	2,709,397	2,709,397	-	9,570,014	28.32%
2014	2,543,510	2,543,510	-	9,314,258	27.31%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

Schedules of Employer and Other Nonemployer Entity Contributions

Rhode Island Judicial Retirement Fund Trust Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 1,240,501	$ 332,340	$ 908,161	$ 988,161	33.63%
2016	1,200,000	140,141	1,059,859	963,703	14.54%
2015	1,623,061	-	1,623,061	1,320,875	0.00%
2014	1,695,434	-	1,695,434	1,276,208	0.00%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Employer and Other Nonemployer Entity Contributions

Rhode Island State Police Retirement Fund Trust Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
2017	$ 16,387,092	$ 16,566,076	$ (178,984)	n/a	n/a

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

The SPRFT trust plan was created in fiscal 2017.

Schedules of Employer and Other Nonemployer Entity Contributions

Municipal Employees' Retirement System Plan

Plan	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a % of Covered Employee Payroll
General Employees					
2017	$ 31,686,825	$ 31,686,825	-	$ 244,466,993	12.96%
2016	30,300,536	30,300,536	-	233,474,157	12.98%
2015	28,763,340	28,763,340	-	228,189,238	12.61%
2014	26,704,094	26,704,094	-	223,124,242	11.76%
Police and Fire					
2017	$ 16,855,985	$ 16,855,985	-	$ 102,020,230	16.52%
2016	16,296,479	16,296,479	-	96,737,235	16.85%
2015	15,588,547	15,588,547	-	91,293,039	17.08%
2014	11,193,028	11,193,028	-	88,783,926	12.89%

See notes to required supplementary information.

Schedule is intended to show information for 10 years - additional years will be displayed as they become available.

The schedules are intended to present ten years of data. Additional years of data will be presented as they become available.

1. Actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers

The actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers are described in Note 8 to the financial statements.

The following information is presented about factors that significantly affect trends in the amounts reported between years.

June 30, 2017 measurement date –

As part of the 2017 Actuarial Experience Investigation Study for the six-year period ending June 30, 2016 as approved by the System Board on May 15, 2017, certain assumptions were modified and reflected in the determination of the net pension liability (asset) at the June 30, 2017 measurement date. The following summarizes the more significant changes in assumptions:

- Decreased the general inflation assumption from 2.75% to 2.50%;
- Decreased the nominal investment return assumption from 7.50% to 7.00%;
- Decreased the general wage growth assumption from 3.25% to 3.00%;
- Decreased salary increase assumptions; and
- Updated the post-retirement mortality tables to variants of the RP-2014 table. For the improvement scale, update to the ultimate rates of the MP-2016 projection scale.

Additionally, the municipal bond index rate, based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" (3.56% at June 30, 2017) was applied to all periods of projected benefit payments to determine the total pension liability instead of the plan's assumed investment rate of return of 4.0%.

June 30, 2016 measurement date –

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2016 measurement date compared to the June 30, 2015 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 2.85% instead of the plan's assumed investment rate of return of 4.0%.

June 30, 2015 measurement date –

There were no changes in actuarial methods or assumptions reflected in the calculation of the net pension liability (asset) of the plans as of the June 30, 2015 measurement date compared to the June 30, 2014 measurement date except for the changes in assumptions for the RIJRFT plan due to use of the municipal bond index rate of 3.8% instead of the plan's assumed investment rate of return of 4.0%.

1. Actuarial methods and assumptions used to calculate the net pension liability (asset) of the participating employers (continued)

Benefit changes are reflected in the calculation of the net pension liability at the June 30, 2015 measurement date. The following is a summary of those benefit changes that resulted from the settlement of the pension litigation and the subsequent enactment of those settlement provisions by the General Assembly.

- Employees with more than 20 years of service at July 1, 2012 will increase their employee contribution rates to 11% for state employees and municipal general employees will contribute 8.25% (9.25% for units with a COLA provision) and participate solely in the defined benefit plan going forward – service credit accruals will increase from 1% to 2% per year.

- Members are eligible to retire upon the attainment of: age 65 with 30 years of service, 64 with 31 years of service, 63 with 32 years of service, or 62 with 33 years of service. Members may retire earlier if their RIRSA date is earlier or are eligible under a transition rule.

- MERS public safety employees may retire at age 50 with 25 years of service, or any age with 27 years of service. MERS public safety employees will contribute 9.00% (10.00% for units with a COLA provision)

- Employees with more than 10 but less than 20 years of service at July 1, 2012 will receive an increased employer contribution to the defined contribution plan. Also, members who earn less than $35,000 per year will not be required to pay the administrative fees to the defined contribution plan.

- Members who retired from a COLA eligible plan before July 1, 2012 will received a one-time cost of living adjustment of 2% of the first $25,000 paid as soon as administratively possible.

- Retirees as of June 30, 2015 will receive two $500 stipends; the interim cost of living increases will occur at 4 year rather than 5 year intervals.

- The COLA formula was adjusted to: 50% of the COLA is calculated by taking the previous 5-year average investment return, less 5.5% (5yr Return - 5.5%, with a max of 4%) and 50% calculated using previous year's CPI-U (max of 3%) for a total max COLA of 3.5%. This COLA is calculated on the first $25,855, effective 01/01/16, and indexed as of that date as well. (The indexing formula is run annually regardless of funding level each year.)

- Minor adjustments were made to the actuarial reduction for employees choosing to retire early.

2. Actuarially determined contributions

Actuarially determined contributions are calculated as of June 30, three years prior to the fiscal year in which the contributions are reported. For example, the contribution rates for fiscal 2017 for the plans were based on valuations performed as of June 30, 2014.

Contributions for teachers within the ERS plan include $96,542,150, $87,997,637, $84,943,801 and $76,700,915 of nonemployer entity contributions made by the State of Rhode Island for fiscal years 2017, 2016, 2015, and 2014, respectively.

2. Actuarially determined contributions (continued)

Contributions for the TSB plan are outlined in the General Laws of Rhode Island. Due to the funded status of the plan, there was no actuarially determined contribution required to the plan in years 2014 through 2017.

Summary of Actuarial Methods and Assumptions Used to determine Fiscal 2017 contribution rates

	ERS		MERS	SPRBT	JRBT	RIJRFT	TSB
	State Employees	*Teachers*					
Valuation Date	June 30, 2014 for all plans except RIJRFT which was based on June 30, 2016 valuation.						
Actuarial Cost Method	Entry Age Normal - the Individual Entry Age Actuarial Cost methodology is used.						
Amortization Method	Level Percent of Payroll – Closed					Level Dollar	Level Dollar
Equivalent Single Remaining Amortization Period	21 years					17 years	
Asset Valuation Method	5 Year Smoothed Market						Market value
Actuarial Assumptions							
Investment Rate of Return	7.50%	7.50%	7.50%	7.50%	7.50%	4.00%	7.5%
Projected Salary Increases	3.50% to 6.50%	3.50% to 13.5%	<u>*General Employees*</u> 3.50% to 7.50% <u>*Police & Fire Employees*</u> 4.0% to 14.0%	3.75% to 8.00%	3.50%	3.50%	3.50% to 13.5%
Mortality	• Male Employees, MERS General and MERS P&F: 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000. • Female Employees, MERS General and MERS P&F: 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.						Mortality the same as for teachers
		Male and female teachers: 97% and 92%, respectively of rates in a GRS table based on male and female teacher experience, projected with Scale AA from 2000.					
Inflation	2.75%						

The required contribution for the newly created (fiscal 2017) State Police Retirement Fund Trust (SPRFT), a plan covering a closed group of retired individuals, was calculated based on a level-dollar amortization over 18 years from June 30, 2016.

2. Actuarially determined contributions (continued)

Cost of Living Adjustments

For the MERS plan, a 2% COLA is assumed after January 1, 2014. For all plans other than TSB, a COLA of 2% is assumed only every five years until the plans achieve an 80% collective funded status in accordance with the law.

COLA provisions were modified with the enactment of the new RISA provisions in July 2015 – these provisions are effective in the actuarial valuations prepared for funding purposes beginning June 30, 2015.

For the TSB plan, an annual 2.75% COLA is assumed – the actual COLA in any year is based on the COLA provided for federal Social Security recipients.

Supplemental contributions

Certain supplemental contributions required by the General Laws were made to the ERS plan. These amounts are not included in the annual required contribution amounts or the percentage contributed in the schedule. These supplemental contributions are more fully explained in Note 7 (d) to the financial statements.

3. Covered employee payroll

Covered employee payroll, as included in required supplementary information schedules, includes projected annualized payroll amounts for employees beginning employment during the fiscal year. Consequently, the covered employee payroll amounts included in the required supplementary information schedules may differ from the actual fiscal year payroll base to which the actuarially determined contribution rate was applied. Additionally, the contribution amount as a percentage of covered payroll may differ from the Board approved contribution rate expressed as a percentage of payroll.

4. Schedules of Investment Returns

The annual money-weighted returns on investments within each of the plans, net of investment expense, are shown in the required supplementary information schedule. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The schedules are intended to present ten years of data. Additional years of data will be presented as they become available.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Supplementary Information

Schedule of Investment Expenses

Schedule of Administrative Expenses

Schedule of Consultant Expenses

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Schedule of Investment Expenses - Fiscal Year Ended June 30, 2017

INVESTMENT MANAGEMENT FEES BY ASSET CLASS		
GLOBAL EQUITIES		
State Street Global Advisors - Russell 3000 Commingled Fund	$ 160,936	
Shott Capital/Hamilton Lane	11,740	
State Street Global Advisors - QVM Tilt	443,516	
State Street Global Advisors - MSCI EAFE -Commingled Fund	219,060	
State Street Global Advisors - MSCI CAD - Commingled Fund	30,424	
State Street Global Advisors - MSCI Emerging Markets - Commingled Fund	332,938	$ 1,198,614
FIXED INCOME		
Fidelity Institutional Asset Management (Pyramis)	669,463	
Mackay Shields	672,999	
Brown Brothers - TIPS/GILB	309,491	1,651,953
LONG DURATION - WAMCO		1,409
CREDIT		
WAMCO	503,755	
PIMCO	524,788	1,028,543
PUBLIC INFRASTRUCTURE - Harvest Partners		1,246,493
REAL ESTATE		2,067,154
PRIVATE INFRASTRUCTURE		491,538
PRIVATE EQUITY		8,620,788
Subtotal - Investment Management Fees by Asset Class		**16,306,492**
PROFESSIONAL FEES		
Legal	107,532	
BNY Mellon - Custodial	489,164	
Cliffwater	450,000	
PCA	310,416	
Aberdeen	3,468	
Russell	318,214	
Payden & Rygel	75,098	
PCA Infrastructure	75,000	
PCA Real Estate	114,583	
Subtotal - Professional Fees		**1,943,475**
OPERATING EXPENSES		
Investment Administration -- Office of the General Treasurer	$ 1,380,962	
Other Expenses	327,439	
Subtotal - Operating Expenses		**1,708,401**
TOTAL INVESTMENT EXPENSES		**$ 19,958,368**

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Schedule of Administrative Expenses

Fiscal Year Ended June 30, 2017

DEFINED BENEFIT PLANS		
Personnel Expenses		
Salaries and wages	$	2,653,093
Benefits		1,552,389
Total personnel expenses		4,205,482
Purchased Services - Consultant Expenses		
Disability determination		290,728
Legal		216,559
Actuary		410,496
Financial services		169,000
Information technology services		2,421,007
Stenographic services		4,779
Office equipment		29,674
Other professional services		42,562
Total purchased services		3,584,805
Operating Expenses		
Communications		141,823
Office and supplies		139,441
Printing and advertising		17,106
Travel		8,960
Occupancy		199,707
Insurance		75,444
Other		6,965
Total operating expenses		589,446
Subtotal administrative expenses - defined benefit plans	$	8,379,733
DEFINED CONTRIBUTION PLANS		
Plan Administrative Expenses - TIAA-CREF	$	1,177,819
TOTAL ADMINISTRATIVE EXPENSES -- ALL PLANS	$	9,557,552

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Schedule of Consultant Expenses

Fiscal Year Ended June 30, 2017

Disability Determination Services		
Medical exam fees - various physicians		$ 290,728
Legal		
Adler Pollock & Sheehan P.C.	$ 50,950	
Hinckley, Allen, & Snyder LLP	18,937	
Schechtman Halperin Savage LLP	138,175	
Hearing officers - various	8,498	216,560
Actuary		
Gabriel Roeder Smith & Co.		410,496
Financial Services		
Funston Advisory Services LLC		169,000
Information Technology		
ACOM Solutions, Inc.	271	
Hewlett-Packard	287,157	
L.R.W.L., Inc.	41,629	
Morneau Shepell *	2,091,949	2,421,006
Stenographic Services		
Allied Court Reporters Inc.		4,779
Office Equipment		
Konica Minolta Business Solutions USA	9,556	
Park Place Technologies	19,950	
Robinson Time Service & Sales Co.	168	29,674
Other Professional Services		
Pension Benefit Information	11,750	
RI Temps/RI Personnel Inc.	28,218	
State of Rhode Island	1,815	
Translator services	779	42,562
Total purchased services - consultant expenses		**$ 3,584,805**

* amount for this vendor reflected as expense during fiscal year - see note 3 to the financial statements

Office of the Auditor General
State of Rhode Island and Providence Plantations - General Assembly
Dennis E. Hoyle, CPA - Auditor General
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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Joint Committee on Legislative Services, General Assembly
State of Rhode Island and Providence Plantations:

Retirement Board of the Employees' Retirement System of the State of Rhode Island:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the plans within the Employees' Retirement System of Rhode Island (System) as of and for the year ended June 30, 2017 and the related notes to the financial statements, which collectively comprise the System's basic financial statements, and have issued our report thereon dated December 20, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Joint Committee on Legislative Services, General Assembly
Retirement Board of the Employees' Retirement System of the State of Rhode Island:

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Dennis E. Hoyle, CPA
Auditor General

December 20, 2017

Investment Section

State of Rhode Island and Providence Plantations
Office of the General Treasurer

Seth Magaziner
General Treasurer

December 22, 2017

Retirement Board of the Employees' Retirement System of Rhode Island
State Investment Commission
50 Service Avenue
Warwick, RI 02886

Dear ERSRI Fiduciaries:

A robust state retirement system plays a critical role in recruiting and retaining the talented employees on whom the State of Rhode Island depends for quality public services, such as teaching in our schools, fixing our roads, protecting our environment and policing our streets. Pension assets exist to fund future pension payments, both in the near and the long term. The Employees' Retirement System of Rhode Island (ERSRI) was established effective July 1, 1936 with RI General Law (RIGL) 36-8-2. RIGL 35-10 established the State Investment Commission (SIC) and gave it the authority to manage the investments of the System. The General Treasurer is the chair of this commission, and the day to day operation and management of the fund is guided by the Treasurer's Office, under the leadership of the Chief Investment Officer.

The General Laws mandate that the State Investment Commission adopt a statement of investment policies and objectives consistent with the prudent person standard. This standard requires SIC members to discharge their duties solely in the interests of ERSRI participants and their beneficiaries with such care, skill, prudence, and diligence under the circumstances then prevailing that a person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of like character and with like aims. Additionally, this standard requires the SIC to diversify the investments to minimize the risk of large losses.

As a result of these standards, an Investment Policy Manual was created to govern the management of the System's assets. The objectives, policies, and procedures outlined in this Policy Manual were created as a framework for the management of the Plan. It sets forth an investment structure for managing the assets. This structure includes various asset classes and investment styles that, in total, will provide a prudent level of diversification and investment return over time. To achieve these goals, the commission has established an Investment Policy Statement for each class of assets or individual manager mandates. The Chief Investment Officer

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and staff monitor adherence to these mandates regularly. The commission has approved measurement standards and monitoring procedures used in the evaluation of the performance of investment funds. A complete copy of this manual may be found at http://www.treasury.ri.gov/investments.

The Employees' Retirement System is a long-term investor, with a broadly diversified portfolio of global assets of both public and private nature. The allocation is established to maximize returns while mitigating risks, to maintain the System through different economic cycles. To assist in the maintenance and evaluation, the System employs consultants for both public and private assets. The consultants, additionally, will review potential managers under consideration, and provide recommendations to the Commission. These consultants also produce reports to the System, on a quarterly basis, examining market conditions and plan performance and allocation. In addition, performance results are calculated using a time-weighted return methodology and are reported on a net-of-fees basis.

In fiscal 2017, markets were driven by strong equity returns, both domestically and internationally. The U.S. equity markets have now realized gains for over 8 consecutive years, as measured by a Russell 3000 return of 18.5% in fiscal 2017. Though the U.S. equity markets generated significant returns, the results modestly lagged those of international public equity investments. The MSCI Emerging Markets (net) Index returned 23.8% and the FTSE All World ex-U.S. Index (net) earned 18.8%. High quality traditional fixed income investments generated negative returns in fiscal 2017, due in part to the bond market's selloff post-election in November 2016. The Bloomberg Barclays U.S. Aggregate Bond Index returned -0.3% during the fiscal year.

During the fiscal year, the portfolio returned 11.62%, time-weighted net of fees, exceeding the plan benchmark's return of 11.34%. Consistent with the global markets, the portfolio's returns were driven by strong performance across its equity allocation. Over a 3-year time frame, the ERSRI portfolio returned 4.41%, time-weighted net of fees. Over a 5-year time frame, the ERSRI portfolio earned 7.8%, time-weighted net of fees.

Towards the end of fiscal year 2017, ERSRI began the Crisis Protection Class (CPC) implementation process as part of the "Back to Basics" investment program. The first round of CPC funding ($160 million) occurred in mid-June. This program was designed to meet the challenges facing the System and position us well for the future. "Back to Basics" is a diversified asset allocation strategy that focuses on low-cost equity index funds, complemented by other assets designed to protect the System against volatility and inflation risks, and seeks to match or exceed the actuarial assumed rate of 7.0% over the long run.

Sincerely,

Alec Stais

Alec P. Stais, Chief Investment Officer

Investment Summary and Results

U.S. Equities

The prolonged period of positive U.S. Equity Market returns endured in fiscal year 2017, with the Russell 3000 posting a return of 18.5%. Market sentiment was driven by corporate tax reform expectations, infrastructure spending, potential deregulation, and improving fundamental factors. The Financial Services and Technology sectors drove S&P performance, returning 35.4% and 33.9%, respectively. S&P returns were tempered by the Telecom and Energy sectors, which returned -11.7% and -4.1%, respectively. Positive returns were realized across all market cap bands, with small-cap equities substantively outperforming large-cap equities. The Russell 2000 Index outperformed the Russell 1000 Index by 6.5% during the fiscal year, though the Russell 1000 has outperformed the Russell 2000 by 4.3% calendar year to date. The S&P Growth Index outperformed the S&P Value Index by 3.4% over the course of fiscal year 2017. Most of this outperformance was realized during the first 6 months of calendar 2017, as the S&P Growth Index outperformed by 8.5%.

Non-U.S. Equities

While domestic equities outperformed in the first half of fiscal 2017, international equities (both developed and emerging market) earned higher returns during the first half of calendar 2017. The MSCI Emerging Markets (net div) Index returned 23.8% on the fiscal year, while recognizing a return of 18.4% during the first 6 months of calendar 2017. The FTSE All World ex-U.S. Index also posted elevated returns, earning 18.8% over the fiscal year.

Fixed Income

The credit markets yielded higher returns than rates markets during the fiscal year. The Fund's traditional fixed income benchmark, the Bloomberg Barclays U.S. Aggregate Bond Index, returned -0.3% fiscal year to date, driven by the -2.5% return earned during the first half of fiscal 2017. High yield credit outperformed the rest of the fixed income market, as the Bloomberg Barclays U.S. Corporate High Yield Index returned 12.7% during the fiscal year.

Alternative Investments

Alternatives achieved comparatively strong performance relative to recent historical returns. During the fiscal year, the HFRI Equity Hedge (Total) Index returned 12.1%, considerably above its 5-year annualized return of 6.3%. The HFRI FoF Composite Index returned 6.5%, compared to the Index's 3.9% annualized 5-year return. Private Equity posted the strongest fiscal year returns across the alternatives space. The Fund's PE benchmark (ILPA All Fds Custom BM 1Q Lag) returned 13.2% fiscal year to date. The Fund's Real Estate benchmark (NFI-ODCE Index) returned 7.4% over the course of the Fiscal Year. The Fund's MLP benchmark (Alerian MLP Index) got off to a slow start in calendar 2017, returning -2.7%, though the Index has returned 0.4% fiscal year to date.

			Annualized	
Index Summary (6/30/2017)	**6 month**	**1 Year**	**3 Year**	**5 Year**
Equity				
Russell 3000 Index	8.9%	18.5%	9.1%	14.6%
MSCI Canada Net Dividend Index	3.2%	11.7%	-3.9%	3.0%
MSCI World Net Dividend Index	10.7%	18.2%	5.2%	11.4%
MSCI All Country World Net Index	11.5%	18.8%	4.8%	10.5%
MSCI EAFE Net Dividend Index	13.8%	20.3%	1.2%	8.7%
MSCI Emerging Markets Net Dividend Index	18.4%	23.8%	1.1%	4.0%
Fixed Income				
Bloomberg Barclays Aggregate	2.3%	-0.3%	2.5%	2.2%
Bloomberg Barclays US Corporate High Yield	4.9%	12.7%	4.5%	6.9%
Credit Suisse Leveraged Loan	2.0%	7.5%	3.5%	4.8%
Bloomberg Barclays US TIPS 1-10Y	0.7%	-0.3%	0.4%	0.3%
BofAML US High Yield BB-B	4.6%	11.2%	4.5%	6.7%
Barclays US Treasury LT Index	5.4%	-7.2%	5.6%	2.8%
Other				
Alerian MLP	-2.7%	0.4%	-11.2%	1.8%
ICE BofAML 3 Month US Treasury Bill G0O1	0.3%	0.5%	0.2%	0.2%
HFRI Fund of Funds Composite Index	3.2%	6.5%	1.6%	3.9%
CPI + 4%	3.5%	5.6%	4.9%	5.3%
NFI-ODCE Index	3.5%	7.4%	10.9%	11.3%
HFRI Equity Hedge (Total) Index	5.9%	12.1%	2.9%	6.3%
ILPA All Fds Custom BM 1Q Lag	6.6%	13.2%	9.0%	14.1%

			Annualized	
Index Summary (6/30/2017)	**6 month**	**1 Year**	**3 Year**	**5 Year**
MSCI Emerging Markets Net Dividend Index	18.4%	23.8%	1.1%	4.0%
MSCI EAFE Net Dividend Index	13.8%	20.3%	1.2%	8.7%
MSCI All Country World Net Index	11.5%	18.8%	4.8%	10.5%
Russell 3000 Index	8.9%	18.5%	9.1%	14.6%
MSCI World Net Dividend Index	10.7%	18.2%	5.2%	11.4%
ILPA All Fds Custom BM 1Q Lag	6.6%	13.2%	9.0%	14.1%
Bloomberg Barclays US Corporate High Yield	4.9%	12.7%	4.5%	6.9%
HFRI Equity Hedge (Total) Index	5.9%	12.1%	2.9%	6.3%
MSCI Canada Net Dividend Index	3.2%	11.7%	-3.9%	3.0%
BofAML US High Yield BB-B	4.6%	11.2%	4.5%	6.7%
Credit Suisse Leveraged Loan	2.0%	7.5%	3.5%	4.8%
NFI-ODCE Index	3.5%	7.4%	10.9%	11.3%
HFRI Fund of Funds Composite Index	3.2%	6.5%	1.6%	3.9%
CPI + 4%	3.5%	5.6%	4.9%	5.3%
ICE BofAML 3 Month US Treasury Bill G0O1	0.3%	0.5%	0.2%	0.2%
Alerian MLP	-2.7%	0.4%	-11.2%	1.8%
Bloomberg Barclays US TIPS 1-10Y	0.7%	-0.3%	0.4%	0.3%
Bloomberg Barclays Aggregate	2.3%	-0.3%	2.5%	2.2%
Barclays US Treasury LT Index	5.4%	-7.2%	5.6%	2.8%

The following table reflects S&P 500 sector weighting and 1-year returns:

Index Summary (6/30/2016-6/30/2017)	Benchmark Weight	Benchmark Return
Financial Services	14.6%	35.4%
Technology	22.3%	33.9%
Industrials	10.3%	22.3%
Materials & Processing	2.9%	18.6%
Consumer Discretionary	12.3%	16.9%
Health Care	14.5%	12.5%
Consumer Staples	9.1%	3.1%
Utilities	3.2%	2.5%
Real Estate	2.9%	-0.4%
Energy	6.0%	-4.1%
Telecommunication Services	2.1%	-11.7%

SUMMARY

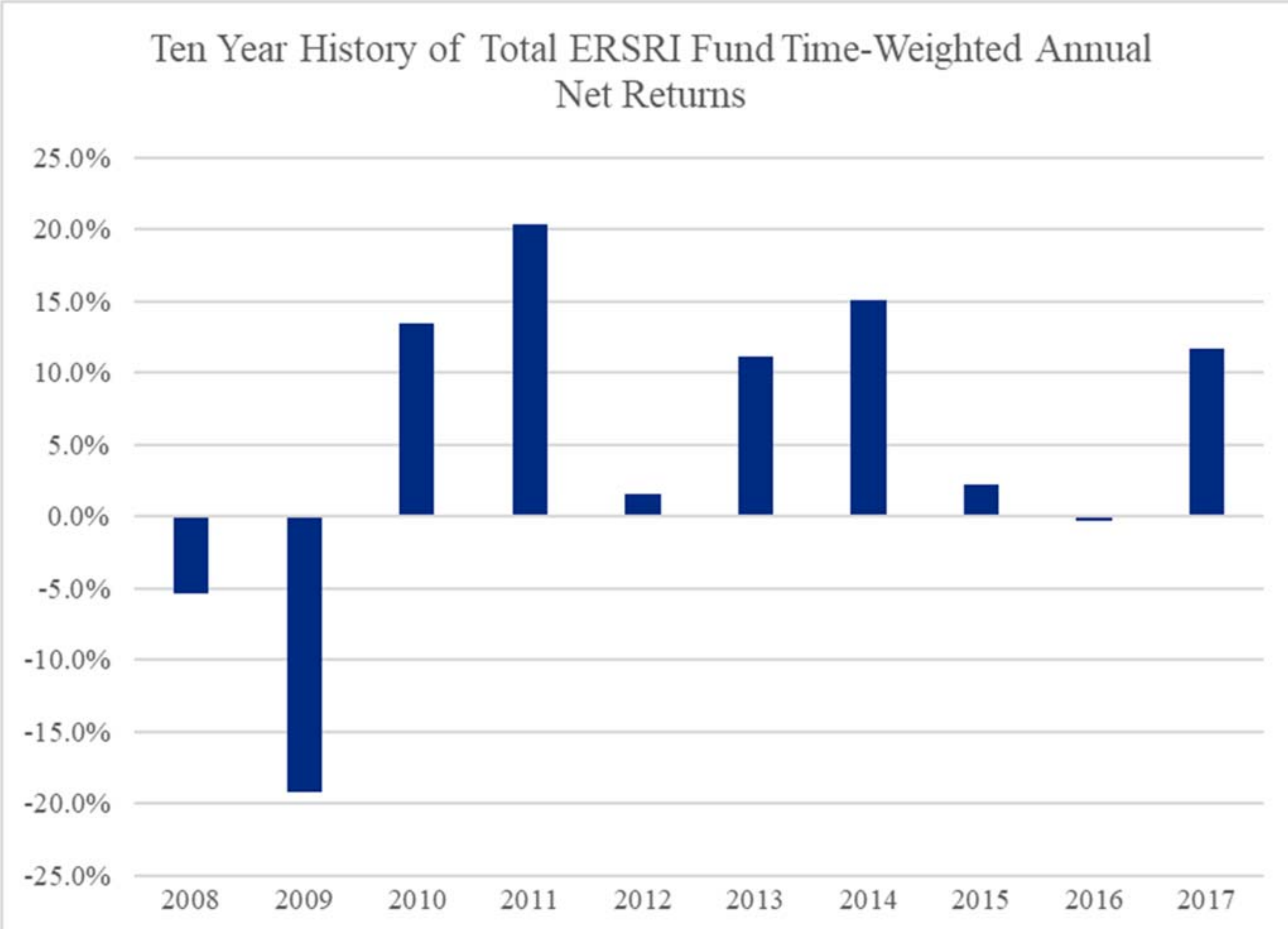
During fiscal year 2017, the total fair market value of the portfolio has increased by $511.6 million, with portfolio gains of $825.8 million offset by $314.2 million in transfers to assist in fulfilling pension obligations. The portfolio's 11.62% time-weighted return, net of fees, exceeded the 11.34% benchmark and well surpassed the 10.80% 60/40 benchmark return. The 60/40 is a blended equity/fixed income benchmark that is weighted 60% towards the MSCI All Country World Net Index and 40% towards the Bloomberg Barclays U.S. Aggregate Bond Index.

The plan's return was primarily driven by strong performance across its equity allocation, including a 23.42% emerging market public equity time-weighted return, net of fees. The Fund's equity hedge fund investments (8.46% time-weighted return, net of fees) underperformed the benchmark (12.33% return), while the Fund's global public equity allocation (18.97% time-weighted return, net of fees) modestly outperformed its benchmark (18.78% return). The plan's traditional fixed income investments achieved a positive time-weighted return of 0.32% net of fees, despite the fact that the Bloomberg Barclays U.S. Aggregate Bond Index returned -0.31%.

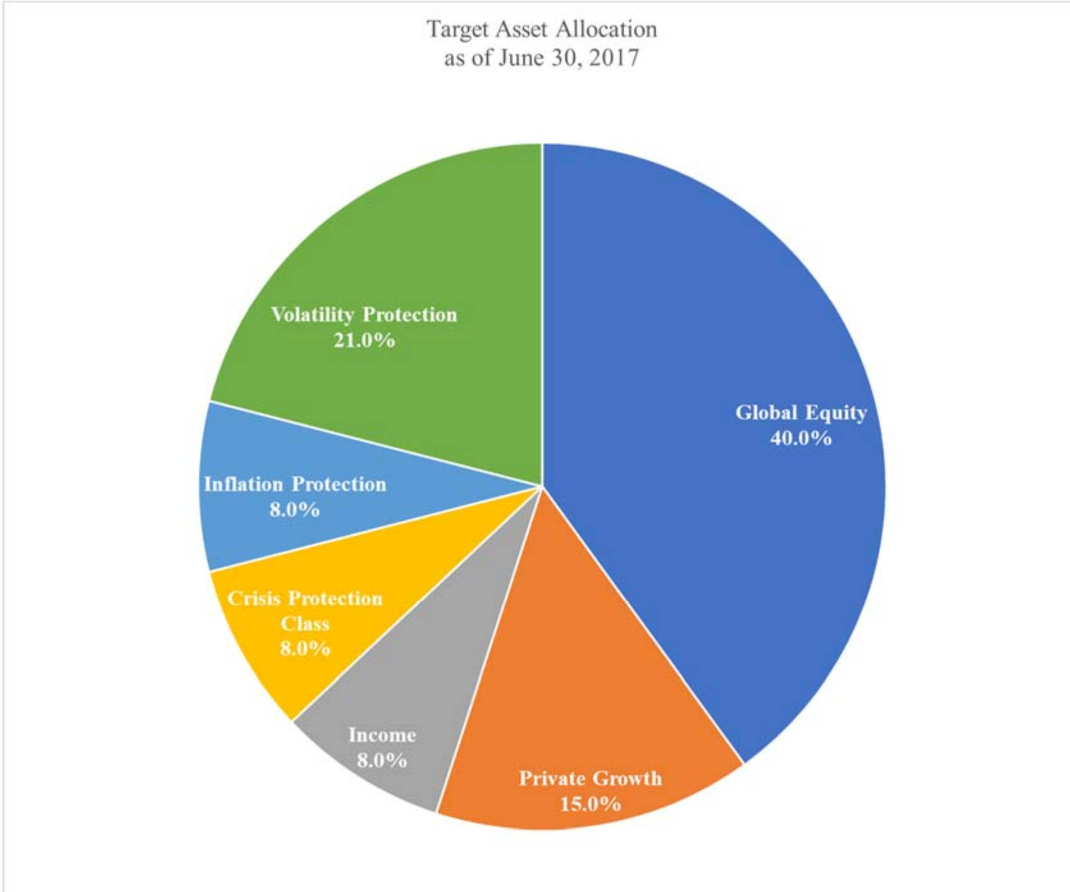
Over a 3-year time frame and when comparing against a 60/40 portfolio, the ERSRI portfolio outperformed, returning 4.41% time-weighted net of fees while the 60/40 portfolio earned 4.03%. Over a 5-year time frame, the ERSRI portfolio earned 7.80% time-weighted net of fees, outperforming the 60/40 portfolio which posted 7.27%.

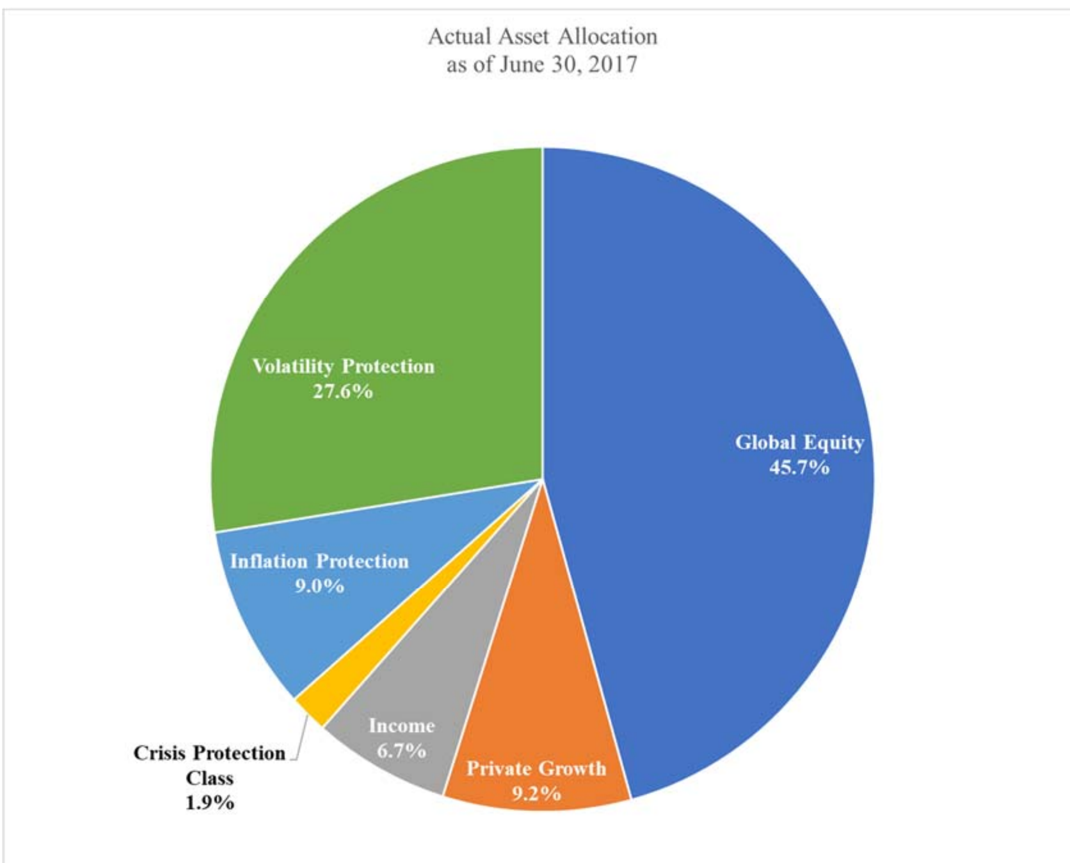
ANNUALIZED TIME-WEIGHTED NET INVESTMENT RETURNS – ACTUAL VERSUS INDICES

	Current Fiscal Year 2017	Annualized 3 Year	5 Years	10 Years
TOTAL PLAN	**11.62 %**	**4.41 %**	**7.80 %**	**4.36 %**
Total Plan Benchmark	**11.19**	**4.24**	**7.72**	**4.29**
US Public Equity	18.53	9.19	14.51	-
Russell 3000 Index	18.51	9.10	14.59	-
Non-US Public Equity	20.79	0.99	7.36	-
Total International Equity BM	20.45	0.80	7.13	-
QVM Tilt	17.81	-	-	-
MSCI World Net Dividend Index	18.20	-	-	-
Private Equity	13.75	8.49	10.44	8.23
ILPA All Fds BM 1Q Lag 2	13.19	8.98	14.09	8.52
Equity Hedge Funds	8.46	1.71	5.96	-
HFRI Equity Hedge (Total) Index	12.14	2.93	6.27	-
Traditional Fixed Income	0.32	2.53	2.69	4.47
Bloomberg Barclays U.S. Aggregate Bond Index	-0.31	2.48	2.21	4.48
Real Return Hedge Funds	6.20	3.67	4.97	-
HFRI Fund of Funds Composite Index	6.49	1.55	3.87	-
Credit Aggregate	6.40	2.60	-	-
Credit Aggregate	7.12	3.94	-	-
Inflation-Linked Bonds	-0.51	0.97	1.05	-
Total Inflation Linked Custom	-0.26	1.06	1.10	-
HY Infrastructure	2.80	-	-	-
Alerian MLP Index	0.40	-	-	-
Priv Listed Infrastructure	13.79	-	-	-
CPI + 4%	5.63	-	-	-
TOTAL REAL ESTATE	8.66	11.18	9.86	2.16
NFI-ODCE Index	7.36	10.87	11.26	7.52
ERSRI CASH	1.23	0.98	0.63	1.54
ICE BofAML 3 Month US Treasury Bill G0O1	0.49	0.23	0.17	0.58



ACTUAL ASSET ALLOCATION VERSUS TARGET ASSET ALLOCATION		
	As of June 30, 2017	
	Actual	Target
Global Equity	45.7 %	40.0 %
Private Growth	9.2	15.0
Income	6.7	8.0
Crisis Protection Class	1.9	8.0
Inflation Protection	9.0	8.0
Volatility Protection	27.6	21.0
TOTAL FUND	100.0 %	100.0 %


Target Asset Allocation
as of June 30, 2017
Volatility Protection
21.0%
Global Equity
40.0%
Inflation Protection
8.0%
Crisis Protection
Class
8.0%
Income
8.0%
Private Growth
15.0%


Actual Asset Allocation
as of June 30, 2017
Volatility Protection
27.6%
Global Equity
45.7%
Inflation Protection
9.0%
Income
6.7%
Crisis Protection
Class
1.9%
Private Growth
9.2%

TEN LARGEST EQUITY HOLDINGS BY FAIR VALUE*

	Shares	Top Equity Holdings	Market Value
1	558,251	Apple Inc	$ 80,399,370
2	788,613	Microsoft Corp	54,359,095
3	45,525	Alphabet Inc	41,832,926
4	451,519	JPMorgan Chase & Co	41,268,856
5	30,621	Amazon.com Inc	29,641,572
6	204,202	Johnson & Johnson	27,013,933
7	166,952	Facebook Inc	25,206,441
8	262,103	Procter & Gamble Co/The	22,842,243
9	248,967	Nestle SA	21,695,082
10	121,035	Berkshire Hathaway Inc	20,499,775

The majority of these shares are held in the Commingled Equity Fund.

TEN LARGEST FIXED INCOME HOLDINGS BY FAIR VALUE*

	Security	Rate/Maturity	Market Value
1	U.S. Treasury Note/Bond	1.125% 06/15/2018 DD 06/15/15	$ 40,399,258
2	U.S. Treasury Note/Bond	1.625% 06/30/2020 DD 06/30/15	33,442,756
3	U.S. Treasury Note/Bond	1.250% 10/31/2021 DD 10/31/16	32,087,880
4	U.S. TIPS	2.000%001/15/2026 DD 01/15/06	31,571,053
5	U.S. TIPS	0.125% 01/15/2023 DD 01/15/13	30,626,697
6	U.S. TIPS	1.875% 07/15/2019 DD 07/15/09	29,604,567
7	U.S. TIPS	0.625% 07/15/2021 DD 07/15/11	29,595,524
8	U.S. TIPS	2.375% 01/15/2025 DD 07/15/04	29,065,174
9	U.S. TIPS	0.375% 07/15/2023 DD 07/15/13	23,336,731
10	U.S. TIPS	0.125% 07/15/2024 DD 07/15/14	21,775,626

*A complete listing of separate account portfolio holdings is available by contacting the ERSRI Investment offices. ERSRI also invests in various limited partnerships for which individual holdings data is not factored into this analysis.

SCHEDULE OF INVESTMENT MANAGEMENT AND SERVICE FEES

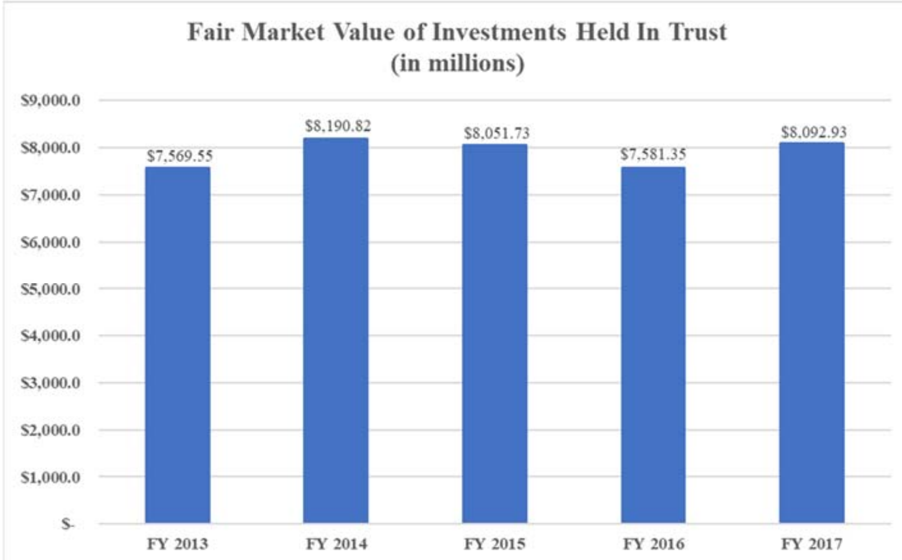
FISCAL YEAR ENDED JUNE 30, 2017

	Fair Market Value of Assets Under Management (in thousands)	Fees (in thousands)	Average Basis Points
INVESTMENT MANAGEMENT FEES			
Global Public Equity	$ 3,698,242	$ 1,199	3
Fixed Income*	1,510,699	1,653	11
Liquid Credit	323,918	1,029	32
Real Assets	874,882	3,805	43
Private Equity	569,612	8,621	151
Hedge Funds**	745,347	-	-
CPC Trend Following**	77,403	-	-
Cash and Cash Equivalents	292,178	-	-
Derivative Investments	645	-	-
TOTAL INVESTMENT MANAGEMENT FEES	**$ 8,092,926**	**$ 16,306**	**20**
PROFESSIONAL FEES AND OPERATING EXPENSES			
Custodial Fees	$ 8,092,926	$ 489	1
Professional Fees — External	8,092,926	1,454	2
Investment Administration Expenses — Internal	8,092,926	1,381	2
Other	8,092,926	327	0
TOTAL PROFESSIONAL FEES AND OPERATING EXPENSES	**$ 8,092,926**	**$ 3,652**	**5**
TOTAL INVESTMENT EXPENSES	**$ 8,092,926**	**$ 19,958**	**25**

*Includes Long Duration (WAMCO).

**The custodian records all transactions on a net of fee basis.

In compliance with GASB standards, certain investments where indirect investment expenses are not readily separable from net investment income, it is acceptable to report the NAV of the investment, net of fees. As such, the list above represents all investment managers and advisors where fees are reported and directly billed to ERSRI and audited by a third party. Additional details on investment performance, asset allocation, and investment expenses (including manager information) can be found at: http://investments.treasury.ri.gov.



SUMMARY OF INVESTMENTS

TYPE OF INVESTMENT	June 30, 2017 Fair Market Value (in millions)	Percent of Total Fair Market Value
DOMESTIC EQUITY		
Domestic Equity Securities	698.0	8.6%
Commingled Funds - Domestic Equity	1,304.9	16.1%
TOTAL DOMESTIC EQUITY	**$ 2,002.8**	**24.7%**
INTERNATIONAL EQUITY		
International Equity Securities	471.0	5.8%
Commingled Funds - International Equity	1,224.4	15.1%
TOTAL INTERNATIONAL EQUITY	**$ 1,695.4**	**20.9%**
FIXED INCOME		
Non-US Government Securities	8.7	0.1%
Collateralized Mortgage Obligations	10.9	0.1%
Corporate Bonds	505.7	6.2%
US Government Securities	699.2	8.6%
US Government Agency Securities	286.2	3.5%
TOTAL FIXED INCOME	**$ 1,510.7**	**18.7%**
REAL ASSETS		
Real Estate	593.1	7.3%
Infrastructure	281.7	3.5%
TOTAL REAL ASSETS	**$ 874.9**	**10.8%**
CASH		
Cash and Cash Equivalents	82.1	1.0%
Money Market Mutual Funds	210.1	2.6%
TOTAL CASH	**$ 292.2**	**3.6%**
OTHER INVESTMENTS		
Term Loans	323.9	4.0%
Private Equity	569.6	7.0%
Hedge Funds	745.3	9.2%
Crisis Protection Class -Trend Following	77.4	1.0%
Derivative Investments	0.6	0.0%
TOTAL INVESTMENTS	**$ 8,092.9**	**100.0%**

*This represents the fair market value of investments before the $26.6 million net payable for investments purchased.

Employees' Retirement System of Rhode Island
Schedule of Investment Expenses
Fiscal Year Ended June 30, 2017

Global Equities		
SSGA Russell 3000	$ 160,936	
Shott Capital/Hamilton Lane	11,740	
SSGA QVM Tilt	443,516	
SSGA MSCI EAFE	219,060	
SSGA MSCI CAD	30,424	
SSGA MSCI Emerg Mkts	332,938	$ 1,198,614
Private Equity	8,620,788	8,620,788
Fixed Income		
Pyramis	669,463	
Mackay Shields	672,999	1,342,461
Long Duration		
WAMCO	1,409	1,409
Real Return		
WAMCO	503,755	
PIMCO	524,788	
Brown Bros.TIPS/GILB	309,491	1,338,034
Real Assets		
Public Infrastructure -Harvest Partners	1,246,493	
Real Estate	2,067,154	
Private Infrastructure	491,538	3,805,185
Other Managers		
Russell Overlay	318,214	
Payden & Rygel	75,098	393,312
Subtotal - Investment Management Expenses		**16,699,804**
Professional Fees		
Legal	$ 107,531	.
BNY Mellon - Custodial	489,164	
Cliffwater	450,000	
PCA	310,417	
Aberdeen	3,468	
PCA Infrastructure	75,000	
PCA Real Estate	114,583	
Sub Total-Professional Fees		**1,550,163**
Subtotal - Investment Management Expenses and Professional Fees		**18,249,967**
Operating Expenses		
Investment Administration	$ 1,380,962	
Other Expense	327,439	
Subtotal - Operating Expenses		**1,708,401**
Total Investment Expenses		**$ 19,958,368**

Employees' Retirement System of Rhode Island
Fees & Expenses for Investment Consultants, Managers, Advisors, & Service Providers
Fiscal Year Ended June 30, 2017

Global Equities

Hamilton Lane	$	11,740
State Street Global Advisors		1,186,874
Subtotal - Global Equities	**$**	**1,198,614**

Fixed Income

Fidelity Institutional Asset Management		669,463
MacKay Shields		672,999
Subtotal - Fixed Income	**$**	**1,342,461**

Crisis Protection

CPC CB LLC	$	-
CPC QIS LLC		-
MacKay Shields		-
Western Asset Management Company		1,409
Subtotal - CPC	**$**	**1,409**

Real Return

Brown Brothers Harriman		309,491
Pacific Investment Management Company		524,788
Western Asset Management Company		503,755
Subtotal - Real Return	**$**	**1,338,034**

Real Assets

Public Infrastructure		
Harvest Partners	$	1,246,493
Private Infrastructure		
ISQ Global		72,427
Stonepeak Infra Fund II		419,111
Real Estate		
Crow Holdings I		240,000
Heitman America		850,664
IC Berkeley Partners IV		192,928
JP Morgan Strategic Property		487,544
Magna Hotel Fund III		17,294
PRISA		90,107
Waterton Venture XII		188,617
Subtotal - Real Assets		**3,805,185**

Private Equity

Advent International VIII	$	341,935	
Aurora III		2,074	
Bain Capital X		134,366	
Baring Asia VI		45,323	
Birch Hill Equity III		11,687	
Braemar Energy Ventures		-	*
Capital Spring V		106,727	
Carlyle Asia IV		660,793	
Centerbridge Capital		46,338	
Centerbridge Partners		530,411	
Coller International V		-	*
CVC Capital VI		411,437	
CVC Euro Equity IV		17,710	
CVC Euro Equity V		89,910	
Encap Energy X		232,132	
Encap IX		330,126	
Fenway III		55,347	
Green Equity V		3,075	
Industry Ventures IV		36,250	
Industry Ventures III		34,106	
LNK Partners		71,927	
Nautic Partners VI		218,650	
Nautic VII		128,752	
Nautic VIII		211,768	
Nordic Capital VII		148,490	
Nordic Capital VIII		418,843	
Paine & Partners		461,107	
Paladin Holdings III		176,746	
Point 406 Ventures		-	*
Providence Equity V		6,798	
Providence Equity VI		120,268	
Providence Equity VII		415,711	
Pt Judith Venture II		50,000	
Riverside Capital Appreciation		556,967	
Riverside Micro-Cap III		95,347	
Sorenson Capital III		876,773	
Southwest Fund VII		647,149	
Tenex Capital II		316,596	
TPG Partners IV		55,741	
TPG Partners VI		18,316	
Trilantic Capital IV		23,978	
		8,109,675	
*Undisclosed Manager fees		511,113	
Subtotal - Private Equity	**$**	**8,620,788**	

Other - Investment

Payden & Rygel	$	75,098
Russell Investments		318,214
Subtotal - Other	**$**	**393,312**

Professional Fees - Investments

Legal		
Adler Pollock & Sheehan P.C.	$	107,531
Investment Advisor		
Cliffwater LLC		450,000
Pension Consulting Alliance		500,000
Investment Custodian		
BNY Mellon - Defined Benefit Plan		489,164
Crisis Protection		
Aberdeen Asset Management		3,468
Subtotal - Professional Fees	**$**	**1,550,163**

Total Expenses & Fees	**$ 18,249,967**

* Due to contractual obligations with the specific investment firms, ERSRI is prohibited from disclosing all fees charged during the fiscal year.

Note: In compliance with GASB standards, certain investments where indirect investment expenses are not readily separable from net investment income, it is acceptable to report the NAV of the investment, net of fees. As such, the list above represents all investment managers and advisors where fees are reported and directly billed to ERSRI and audited by a third party. Additional details on investment performance, asset allocation, and investment expenses (including manager information) can be found at: http://investments.treasury.ri.gov.

Actuarial Section

GRS Retirement Consulting
P: 469.524.0000 | F: 469.524.0003 | www.grsconsulting.com

December 22, 2017

Retirement Board
50 Service Avenue, 2nd Floor
Warwick, RI 02886-1021

Members of the Board:

At the request of the Employees' Retirement System of Rhode Island (ERSRI), Gabriel Roeder Smith & Company (GRS) has performed the actuarial valuation for each of the retirement systems administered by ERSRI. The information in the Actuarial Section is based on our annual actuarial valuation reports, with the most recent valuations conducted as of June 30, 2016, and is intended to be used in conjunction with the full reports. The actuarial information in the Financial Section is based on our GASB Statement No. 67 actuarial valuation reports as of June 30, 2017, and is intended to be used in conjunction with the full reports. The valuation reports were approved by the Board.

This letter and the schedules listed below represent GRS' certification of the funded status as required for the financial report for the fiscal year ended June 30, 2017. GRS prepared the following schedules (information prior to 2016 was provided by ERSRI):

- Net Pension Liability of Employers
- Discount Rate Sensitivity
- Schedule of Changes in the Net Pension Liability
- Schedule of Net Pension Liability
- Schedule of Employer Contributions
- Schedule of Active Member Valuation Data
- Schedule of Retirees Added to and Removed from Rolls
- Analysis of Financial Experience
- Solvency Test
- Schedule of Funding Progress
- Retired Members by Benefit Type
- Average Benefit Payments

Data

The ERSRI staff supplied data for retired, active and inactive members as of June 30, 2016. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The ERSRI staff also supplied asset data as of June 30, 2016.

Actuarial Assumptions and Methods

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on June 18, 2014. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 67. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

Benefits

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2016, and there have been no changes to the benefit provisions since the preceding valuation.

Funding Policy and Objectives

The actuarial cost method and the amortization periods are set by statute. Normal cost rate (as a percent of pay) and actuarial accrued liabilities are computed using the Entry Age Normal actuarial cost method. The employer contribution rate is the sum of two pieces: the employer normal cost rate and the amortization rate. The employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, is the amount required to amortize the unfunded actuarial accrued liability over a closed period. The amortization rate is adjusted for the two-year deferral in contribution rates.

Certification

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Joseph P. Newton, FSA, MAAA, EA
Pension Market Leader and Actuary

Paul T. Wood, ASA, MAAA, FCA
Consultant

Bradley E. Stewart, ASA, MAAA, EA
Consultant

GRS Retirement Consulting

General Information

As required in Rhode Island General Laws, the defined benefit plans within the Employees' Retirement System of Rhode Island (ERSRI) are required to have a certified actuary perform the actuarial valuation of each Plan.

The primary purpose of the actuarial valuation is to provide an amount that the employers should contribute to the Plans, which is referred to as the Annual Required Contribution (ARC). The ARC consists of two components. First, for each fiscal year, the actuary calculates an amount that will be necessary to pay the actuarial estimate of retirement benefits earned in that fiscal year (which is referred to as the "Normal Cost"). Second, in each actuarial valuation, the actuary calculates the funding status of each of the Plans (also known as a "Funded Ratio"), develops a schedule for restoring the funding status of the Plans to 100%, and then includes that fiscal year's portion of that schedule into the calculation of the ARC.

Responsibilities of ERSRI Board

As required in Rhode Island General Laws the employer contribution rates for each Plan are certified annually by the ERSRI Board. These rates are determined actuarially, based on the Plans' provisions, actuarial assumptions, and statutorily approved methodologies in effect as of the valuation date. The Board's current policy is that the contribution rates determined by a given actuarial valuation become effective two years after the valuation date. For example, the rates determined in the June 30, 2016 valuation will be applicable for the fiscal year beginning July 1, 2018 and ending June 30, 2019.

The Retirement Board is required to approve, based on both the recommendations of the actuary and prescribed in Rhode Island General Law, the actuarial methods and assumptions used in the preparation of the actuarial funding valuations. These assumptions include, but are not limited to, mortality, service, economic (investment return, wage inflation, etc.), demographic, and other assumptions.

Actuarial Experience Investigation Studies are conducted every three years by the actuary for the Plans within ERSRI. The actuary will provide a discussion of recent experience, present potential recommendations for new actuarial assumptions and methods, and provide information about the actuarial impact of these recommendations on the liabilities and other key actuarial measures. The study will be conducted in accordance with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuaries preparing the study will have to meet the Qualification Standards of the American Academy of Actuaries. The Board will consider the recommendations and impact of the results of these studies when approving the assumptions and methods to be used in the actuarial funding valuations of each Plan.

For the actuarial valuation for the fiscal year ending June 30, 2016, the methods and assumptions used in the preparation of the valuation were based on the recommendations in the experience study (for the six-year period ending June 30, 2013) that were approved by the Board on June 18, 2014.

The Retirement Board will conduct an actuarial audit every five to seven years, or if the Board hires a new actuary firm. The basic objectives of the audit are to determine if the valuation results provided by the existing actuary are accurate. Are the valuation results based upon reasonable actuarial assumption and methods, and are they in compliance with Actuarial Standards of Practice. Finally, is the actuarial information being provided to ERSRI comprehensive enough to assess the present and future financial status of the System.

Actuarial Schedules and Reports

A copy of the June 30, 2016 actuarial valuation report for each Trust is available on our website www.ersri.org.

ERS

Summary of Benefit Provisions

1. **Effective Date and Authority:** The Employees' Retirement System of Rhode Island (ERSRI) became effective on July 1, 1936 for State Employees and on July 1, 1949 for Teachers. Benefits for State Employees are described in Rhode Island General Laws, Title 36, Chapter 36-10, and benefits for Teachers are described in Rhode Island General Laws, Title 16, Chapter 16-16.

2. **Plan Year:** A twelve-month period ending June 30th.

3. **Administration:** ERSRI is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.

4. **Type of Plan:** ERSRI is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for state employees and for teachers. For Governmental Accounting Standards Board purposes, it is a cost-sharing multiple employer plan.

5. **Eligibility:** Most Rhode Island state employees and certified public school teachers participate in ERSRI. Certain employees of the Airport Corporation, the Economic Development Corporation, and the Narragansett Bay Commission participate in the plan as though they were state employees. State police officers, state judges, and teachers and administrators in the public colleges and universities are covered by their own separate systems, and are therefore excluded. Certain elected state officials are excluded unless they make an election to join ERSRI. Superintendents, principals, business agents and other administrators participate as teachers. Non-certified public school employees, such as teacher's aides, janitors, secretaries, and bus drivers, cannot participate in ERSRI, although they may be covered by the Municipal Employees Retirement System (MERS) or a separate plan maintained by the town or city. Eligible employees become members as of their date of employment.

6. **Employee Contributions:** Effective July 1, 2012, State Employees (excluding Correctional Officers) and Teachers contribute 3.75% of their salary per year. For State Employees and Teachers with 20 or more years of service as of June 30, 2012 the contribution rate beginning July 1, 2015 will be 11.0%. Correctional Officers contribute 8.75% of their salary per year. The state "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h). At their option, the city or town employing a Teacher may also pick up their members' contributions.

7. **Salary:** Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.

8. **Employer Contributions:** For Teachers, the state contributes 40% of the employer contribution rate and the city, town or other local employer contributes the remaining 60%. (This basic 40-60 split is further adjusted, since the State bears the cost of repaying certain amounts taken from the trust in the early 1990's.) Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation. In fiscal years beginning after June 30, 2005, if the State's contribution on

behalf of State Employees decreases, the State shall appropriate an additional amount to the retirement trust. Such amount shall be equal to 20% of any decrease in expected contributions.

9. **Service:** Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods, such as time spent teaching at a public school in another state, by making an additional contribution to purchase the additional service and those costs will be determined at full actuarial value, except for purchases of military service and redeposits of previously refunded contributions. Special rules and limits govern the purchase of additional service and the contribution required.

10. **Final Average Compensation (FAC):** For members eligible to retire as of September 30, 2009, their Final Average Compensation (FAC) will be based on the highest three consecutive annual salaries. For members not eligible to retire as of September 30, 2009, their FAC will be based on the highest five consecutive years of salary. Monthly benefits are based on one-twelfth of this amount.

11. **Retirement**
    a. Eligibility: As of July 1, 2012, retirement eligibility dates will be as follows.
        i. Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age.

        ii. Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's Article 7 Retirement Date, described in Section 11(b) below, and the retirement age applicable to members hired after June 30, 2012 in (i) above. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's Article 7 Retirement Date. The minimum retirement age is 59.

        iii. Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their Article 7 Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits you have accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.

        iv. Effective July 1, 2015, members will be eligible to retire with full benefits at the earlier of their current RIRSA date described in sections (i) – (iii) above or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.

        v. A member who is within five years of reaching their retirement eligibility date, described in this section, and has 20 or more years of service, may elect to retire at any time with a reduced benefit. The reduction is 9% for year 1, 8% for year 2, and 7% for each year thereafter.

        vi. Nurses (RNs) employed by MHRH are eligible to retire when they are at least 55 years old and have a minimum of 25 years of contributing service.

vii. Correctional officers are eligible to retire when they are at least 55 years old and have a minimum of 25 years of contributing service. If a member has 25 years of service as of June 30, 2012, they may retain their Article 7 Retirement Date. Correctional officers who do not work for 25 years will not receive their pension benefit until they reach their Social Security normal retirement age.

b. Article 7 Retirement Date (member's retirement date as of September 30, 2009):

i. Grandfathered Schedule A members—members with at least 10 years of contributory service at June 30, 2005 and eligible for retirement at September 30, 2009—are eligible to retire on or after age 60 if they have credit for 10 years of service, or at any age if they have credit for 28 years of service.

ii. Correctional officers who have reached age 50 and have credit for 20 years of service as of September 30, 2009 are eligible to retire and are grandfathered.

iii. Nurses (RNs) employed by MHRH who have reached age 50 with 25 years of service by September 30, 2009 are eligible to retire and are grandfathered.

iv. Schedule B members—members with less than 10 years of contributory service as of June 30, 2005 and members hired on or after that date—are eligible for retirement on or after age 65 if they have credit for 10 years of service, or on or after age 62 if they have credit for 29 years of service. In addition, a member who attains age 62 with at least 20 years of service credit may retire with an actuarially reduced retirement benefit. The reduction is based on the difference between 65 and the member's age at retirement.

v. Correctional officers who are hired after September 30, 2009 become eligible to retire when they have reach age 55 and have credit for 25 years of service.

vi. Nurses (RNs) employed by MHRH who are hired after September 30, 2009 become eligible when they have reach age 55 and have credit for 25 years of service.

vii. Schedule A members who are not grandfathered, i.e., members who had at least 10 years of creditable service at June 30, 2005 but who were not eligible to retire on September 30, 2009, will be eligible for retirement at an individually determined age. This age is the result of interpolating between the retirement age under the rules applicable to grandfathered employees in (i) above and the retirement age applicable to members hired after September 30, 2009 in (iv) above. The interpolation is based on service as of September 30, 2009 divided by projected service at the retirement age under (i) above.

viii. Correctional officers hired on or before September 30, 2009 who are not eligible for retirement at that date will have an individually determined retirement age. This age is the result of interpolating between the retirement age for grandfathered employees in (ii) above and the retirement age applicable to members hired after September 30, 2009 in (v) above.

ix. Similarly, MHRH nurses (RNs) hired on or before September 30, 2009 who are not eligible to retire at that date will have an individually determined retirement age. This age is the result of interpolating between the retirement age for grandfathered employees in (iii) above and the retirement age applicable to members hired after September 30, 2009 in (vi) above.

c. Monthly Benefit: Upon retirement, members are eligible to commence a benefit determined as the sum of:
    i. Benefit accrual of 1.0% per year for all service after June 30, 2015 unless the member had 20 or more years of service as of June 30, 2012 in which case the benefit accrual is 2.0% per year for service after June 30, 2015, and
    ii. Benefit accrual of 1.0% per year for all service from July 1, 2012 through June 30, 2015, and
    iii. Benefit accruals earned as of June 30, 2012, described in Section (d), below.

For purposes of calculating benefit accruals for service after June 30, 2012, the FAC is determined through retirement. Additionally, Correctional Officers who have completed 25 years of service on or before June 30, 2012 will continue to receive the benefit accrual rate under previous law for years 31 through 35 of service.

d. Benefit accruals earned as of June 30, 2012: The retirement benefit is a percentage of the member's monthly FAC. This percentage is a function of the member's service as described below. For purposes of determining the benefit accruals earned as of June 30, 2012, the service and FAC are frozen as of June 30, 2012.

    i. For grandfathered Schedule A members (members with at least 10 years of contributory service at June 30, 2005 and eligible for retirement at September 30, 2009), benefits are based under this schedule (Schedule A):

For Service In:	Years	Benefit Percentage Earned
The first 10 years of service	1 – 10	1.7% per year
The next 10 years of service	11 – 20	1.9% per year
The next 14 years of service	21 – 34	3.0% per year
The next 1 year of service	35	2.0% per year

The maximum benefit is 80% of FAC.

ii. For Schedule B members (members with less than 10 years of contributory service as of June 30, 2005) and for all future hires, benefits are based on the following schedule (Schedule B):

For Service In:	Years	Benefit Percentage Earned
The first 10 years of service	1 – 10	1.6% per year
The next 10 years of service	11 – 20	1.8% per year
The next 5 years of service	21 – 25	2.0% per year
The next 5 years of service	26 – 30	2.25% per year
The next 7 years of service	31 – 37	2.50% per year
The next 1 year of service	38	2.25% per year

The maximum benefit is 75% of FAC.

iii. For Schedule A members who are not grandfathered, i.e., members who had at least 10 years of creditable service at June 30, 2005 but who were not eligible to retire on September 30, 2009, benefits are based on Schedule A (under (i) above) for service through September 30, 2009 and on Schedule B (under (ii) above) for service after September 30, 2009. The maximum benefit is 80% of FAC.

iv. MHRH nurses receive a benefit determined under the appropriate formula above.

v. Correctional Officers receive a benefit computed under a different formula:

For Service In:	Years	Benefit Percentage Earned
The first 30 years of service	1 – 30	2.0% per year
The next 1 year of service	31	6.0% per year
The next 1 year of service	32	5.0% per year
The next 1 year of service	33	4.0% per year
The next 1 year of service	34	3.0% per year
The next 14 years of service	35	2.0% per year

Members with less than 25 years of service as of June 30, 2012 receive a flat 2.0% per year of service for years 1-30, 3.0 per year of service for years 31-35, and 2.0% per year of service in excess of 35.. The maximum benefit for correctional officers is the greater of the benefit accrual as of June 30, 2012 or 75% of FAC.

e. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see Item 16 below.

f. Death benefit: After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than $4,000.

12. Disability Retirement

a. Eligibility: A member is eligible provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.
b. Ordinary Disability Benefit: The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.
c. Accidental Disability Benefit:
    i. For applications filed before or on September 30, 2009: An annual annuity equal to two-thirds (66 2/3%) of salary at the time of disability.
    ii. For applications filed after September 30, 2009: An accidental disability will be available at two-thirds (66 2/3%) of salary for members who are permanently and totally disabled from engaging in any occupation as determined by the retirement board. If the member is eligible for an accidental disability benefit but deemed able to work in other jobs, the benefit is limited to fifty percent (50%) of salary.
    iii. Benefits will be subject to an annual review by ERSRI.

d. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

a. Eligibility: A member with at least five years of service is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.
b. Monthly Benefit: The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence when the member has met the requirements for a retirement benefit.
c. Payment Form: The same as for Retirement above.
d. Death Benefit before retirement: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in item 15.
e. Death Benefit after Retirement: The same as for Retirement above.

14. Withdrawal (Refund) Benefit

a. Eligibility: All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.

b. Benefit: The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

a. Eligibility: Death must have occurred while an active or an inactive, non-retired member.

b. Basic Benefit: Upon the death of a non-vested member, or upon the death of an inactive, vested member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 9% per year from the date at which the member would have been eligible had he or she remained in service.

c. Lump-sum Benefit: $800 per year of service, with a maximum benefit of $16,000 and a minimum of $4,000. This benefit is only available to active members.

d. Accidental Duty-related Death Benefit: If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member’s spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to 50% of the member’s salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.

16. Optional Forms of Payment: In addition to a life annuity, ERSRI offers members these optional forms of payment on an actuarially equivalent basis:

a. Option 1 (Joint and 100% Survivor) - A life annuity payable while either the participant or his beneficiary is alive.

b. Option 2 (Joint and 50% Survivor) - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.

c. Social Security Option – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member’s death. This option is only available for members with at least 10 years of contributory service as of June 30, 2005.

Actuarial equivalence is based on tables adopted by the Employees’ Retirement Board.

17. Post-retirement Benefit Increase

a. For members with at least 10 years of contributory service as of June 30, 2005 who are retired or eligible to retire as of September 30, 2009, and for all members receiving a disability retirement benefit on that date: a 3.00% compound increase in their retirement benefit each year, beginning in January of the year in which the member reaches the third anniversary of retirement. This increase is not a function of actual increases in the cost of living.

b. For other members who were retired or were eligible to retire as of June 30, 2010: a compound increase in their retirement benefit each year equal to the increase in the CPI, effective on each anniversary date beginning on the third anniversary of retirement. This increase is limited to 3.00%.

c. For other members who were not retired or eligible to retire as of June 30, 2010: a compound increase in their first $35,000 of annual retirement benefit each year equal to the increase in the CPI, effective on each anniversary date beginning on the later of the member's third anniversary of retirement and the month following their 65th birthday. This increase is limited to 3.00%. Additionally, the $35,000 annual COLA limit is applicable for benefits paid in 2010 and would be indexed annually to increase in the same manner as COLAs for Schedule B members (CPI increase for the year, not greater than 3.00%).

d. For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA.

e. Effective July 1, 2012, the following provisions will apply to all members:

    i. The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.

    ii. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%.

    iii. The COLA will be limited to the first $25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first $30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of $25,000 for 2013, $25,000 for 2014, $25,168 for 2015, $25,855 for 2016, and $26,098 for 2017.

f. In addition to the scheduled increases described in section (e) above, there will be a one-time 2% COLA paid in FY2016 on the first $25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of $500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.

MERS

Summary of Benefit Provisions

1. **Authority:** The Municipal Employees' Retirement System (MERS) covers employees of certain participating Rhode Island municipalities and other local governmental units, such as housing authorities, water districts, etc. Benefits are described in Rhode Island General Laws, Title 45, Chapters 19, 19.1, 21, 21.1, 21.2, and 21.3.

2. **Plan Year:** A twelve-month period ending June 30th.

3. **Administration:** MERS is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.

4. **Type of Plan:** MERS is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for each participating governmental unit. For Governmental Accounting Standards Board purposes, it is an agent multiple-employer plan.

5. **Eligibility:** General employees, police officers and firefighters employed by electing municipalities participate in MERS. Teachers and administrators are covered by the separate Employees' Retirement System of Rhode Island, but other school employees may be covered by MERS. Eligible employees become members at their date of employment. Anyone employed by a municipality at the time the municipality joins MERS may elect not to be covered. Elected officials may opt to be covered by MERS. Employees covered under another plan maintained by the municipality may not become members of MERS. Police officers and/or firefighters may be designated as such by the municipality, in which case the special contribution and benefit provisions described below will apply to them, or they may be designated as general employees with no special benefits. Members designated as police officers and/or firefighters are treated as belonging to a unit separate from the general employees, with separate contribution rates applicable. Municipal Employees'

6. **Employee Contributions:** Effective July 1, 2012, General employees contribute 1.00% of their salary per year, and police officers and firefighters contribute 7.00%. General MERS active members with 20 years of service as of June 30, 2012 will contribute 8.25% beginning July 1, 2015. Also, beginning July 1, 2015, MERS Police and Fire active members will contribute 9.00%. In addition, if the municipality has elected one of the optional cost-of-living provisions, an additional member contribution of 1.00% of salary is required. The municipality, at its election, may choose to "pick up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).

7. **Salary:** Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.

8. **Employer Contributions:** Each participating unit's contribution rate is determined actuarially. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.

9. **Service:** Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.

10. **Final Average Compensation (FAC):** Prior to July 1, 2012 and for general employee members eligible to retire as of June 30, 2012, the average was based on the member's highest three consecutive annual salaries. Effective July 1, 2012, the average was based on the member's highest five consecutive annual salaries. Once a member retires or is terminated, the applicable FAC will be the greater of the member's highest three year FAC as of July 1, 2012 or the five year FAC as of the retirement/termination date. Monthly benefits are based on one-twelfth of this amount. Municipal

11. **Retirement:**

    I. General employees: Eligibility

    a. Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age.

    b. Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's prior Retirement Date, described in Section (e) below, and the retirement age applicable to members hired after June 30, 2012 in (a) above. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's prior Retirement Date. The minimum retirement age is 59.

    c. Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.

    d. Effective July 1, 2015, members will be eligible to retire with full benefits at the earlier of their current RIRSA date described in sections (a) – (c) above or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.

    e. A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.

    f. Prior to July 1, 2012, members were eligible for retirement on or after age 58 if they had credit for 10 or more years of service, or at any age if they had credit for at least 30 years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

II. General employees: Monthly Benefit:

a. 2.00% of the member's monthly FAC for each year of service prior to July 1, 2012 and 1.00% of the member's monthly FAC for each year of service from July 1, 2012 through June 30, 2105. 1.0% per year for all service after June 30, 2015 unless the member had 20 or more years of service as of June 30, 2012 in which case the benefit accrual is 2.0% per year for service after June 30, 2015. The benefit cannot exceed 75% of the member's monthly FAC.

III. Police and Fire employees: Eligibility

a. Members are eligible to retire when they are at least 50 years old and have a minimum of 25 years of contributing service or if they have 27 years of contributing service at any age. Members with less than 25 years of contributing service are eligible for retirement on or after their Social Security normal retirement age.

b. Members who, as of June 30, 2012, had at least 10 years of contributing service, had attained age 45, and had a prior Retirement Date (described in Section (e)) before age 52 may retire at age 52.

c. Active members on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.

d. A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.

e. Prior to July 1, 2012, members designated as police officers or firefighters were eligible for retirement at or after age 55 with credit for at least 10 years of service or at any age with credit for 25 or more years of service. Members were also eligible to retire and receive a reduced benefit if they are at least age 50 and have at least 20 years of service. If the municipality elected to adopt the 20-year retirement provisions for police officers and/or firefighters, then such a member was eligible to retire at any age with 20 or more years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

IV. Police and Fire employees: Monthly Benefit

a. 2.00% of the member's monthly FAC for each year of service, up to 37.5 years (75% of FAC maximum).

b. If the optional 20-year retirement provisions were adopted by the municipality prior to July 1, 2012: 2.50% of the member's monthly FAC for each year of service prior to July 1, 2012 and 2.00% of the member's monthly FAC for each year of service after July 1, 2012. The benefit cannot exceed 75% of the member's monthly FAC.

c. Active members (including future hires), members who retire after July 1, 2015 and after attaining age 57 with 30 years of service will have a benefit equal to the greater of their current benefit described in (a) and (b) above and one calculated based on a 2.25% multiplier for all years of service.

V. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see below.

VI. Death benefit:

a. After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than $4,000.

b. Special Police/Fire Death Benefit: A member that does not elect an optional form of payment at retirement will be eligible the active member death benefit, which is an annuity of 30% of the member's salary that will be paid to the member's spouse upon death, for life or until remarriage. Children's benefits may also be payable.

12. Disability Retirement

a. Eligibility: A member is eligible for a disability retirement provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.

b. Ordinary Disability Benefit: The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.

c. Occupational Disability Benefit: An annual annuity equal to two-thirds of salary at the time of disability.

d. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

a. Eligibility: A member with at least ten years of service is vested. Effective July 1, 2012, a member with at least 5 years of service is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

b. Monthly Benefit: The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence at Social Security normal retirement age provided that the member has met the requirements for a retirement benefit.

c. Payment Form: The same as for Retirement above.

d. Death Benefit before Retirement: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in Item 15.

e. Death Benefit after Retirement: The same as for Retirement above.

14. Withdrawal (Refund) Benefit

a. Eligibility: All members leaving covered employment with less than ten years (5 years, effective July 1, 2012) of service are eligible. Optionally, vested members (described in Item 13, above) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.

b. Benefit: The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

a. Eligibility: Death must have occurred while an active member or while an inactive, non-retired member. The basic benefit plus the lump-sum benefit are paid on behalf of an active, general employee, and the special police/fire benefit and the lump-sum benefit are paid on behalf of an active police officer or firefighter. If the death was due to accidental, duty-related causes, the accidental death benefit is paid regardless of whether the employee is a general employee, a police officer, or a firefighter. Inactive members receive a refund of their accumulated contributions without interest.

b. Basic Benefit: Upon the death of a non-vested member, or upon the death of a vested, inactive member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 9% per year from the date at which the member would have been eligible had he or she remained in service.

c. Lump-sum Benefit: $800 per year of service, with a maximum benefit of $16,000 and a minimum of $4,000.

d. Special Police/Fire Death Benefit: In lieu of the basic benefit above, if a police officer or firefighter dies while an active member, an annuity of 30% of the member’s salary will be paid to the member’s spouse, for life or until remarriage. Children’s benefits may also be payable.

e. Accidental Duty-related Death Benefit: If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member’s spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to

50% of the member's salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.

16. **Optional Forms of Payment:** In addition to a life annuity, MERS offers members these optional forms of payment on an actuarially equivalent basis:
    a. Option 1 (Joint and 100% Survivor) - A life annuity payable while either the participant or his beneficiary is alive.

    b. Option 2 (Joint and 50% Survivor) - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.

    c. Social Security Option – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member's death.

    Actuarial equivalence is based on tables adopted by the Employees' Retirement Board.

17. **Post-retirement Benefit Increase:** For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA (age 55 for members designated as police officers and/or firefighters). When a municipality elects coverage, it may elect either COLA C (covering only current and future active members and excluding members already retired) or COLA B (covering current retired members as well as current and future active members).

    a. The COLA will be suspended for any unit whose funding level is less than 80%; however, an interim COLA may be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2018.

    b. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%

    c. The COLA will be limited to the first $25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first $30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of $25,000 for 2013, $25,000 for 2014, $25,168 for 2015, $25,855 for 2016, and $26,098 for 2017.

18. **Special Provisions Applying to Specific Units:** Prior to July 1, 2012, some units had specific provisions that apply only to that unit. The transition rules outlined in Item 11, above, apply to these units in a similar manner. The following summarizes those provisions:

    a. Rhode Island General Law §45-21.2-22.1 contains special provisions that apply to employees of Burrillville Police, but only if adopted by the Town of Burrillville. The Town adopted these provisions effective July 1, 2006. Under these special provisions, the retirement benefit for a member with 20 or more years of service is improved. The new formula is 60.00% x Final

Average Compensation (FAC), plus 1.50% x FAC x Years of Service in Excess of 20, with a maximum benefit equal to 75% of FAC. In addition to this benefit change, the member contribution rate increased from 9.00% to 10.20%.

b. Rhode Island General Law § 45-21.2-6.1, § 45-21.2-5(5), and § 45-21.2-14(d) contain special provisions that apply to members of the South Kingstown police department. Under these special provisions, the member receives a retirement allowance which is a life annuity terminable at the death of the annuitant, and is an amount equal to the sum of two and one-half percent (2.5%) of final compensation multiplied by the years of service accrued after July 1, 1993 and two percent (2%) of final compensation multiplied by the years of service accrued prior to July 1, 1993. The annual retirement allowance in no event shall exceed seventy-five percent (75%) of final compensation. The member contribution rate is 8.00%, plus 1.00% for the adoption of the optional COLA, for a total of 9.00%.

c. Rhode Island General Law § 45-21.2-5 (9) contains special provisions that apply to members of the Hopkinton police department. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 9.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.

d. Rhode Island General Law § 45-21.2-5 (7) and § 45-21.2-14 contain special provisions that apply to members of the Cranston fire department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.

e. Rhode Island General Law §§ 45-21.2-5 (8) and § 45-21.2-14 contain special provisions that apply to members of the Cranston police department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.

f. Rhode Island General Law §§ 45-21.2-6.3 contains special provisions that apply to employees of Richmond Police. The Town adopted these provisions on April 3, 2008, effective July 1, 2008. Under these special provisions, members are eligible to retire after attaining 22 years of service. The retirement benefit for a member with 22 or more years of service was improved to 50.00% x Final Average Compensation (FAC), plus 2.2727% x FAC x Years of Service in Excess of 22, with a maximum benefit equal to 75% of FAC.

State Police

Summary of Benefit Provisions

1. **Effective Date and Authority:** The State Police Retirement Benefits Trust (SPRBT) became effective on July 1, 1989 for State police officers originally hired on or after July 1, 1987. Benefits are described in Rhode Island General Laws, Title 42, Chapter 28.

2. **Plan Year:** A twelve-month period ending June 30th.

3. **Administration:** The State Police Retirement Benefits Trust is administered by the State of Rhode Island Retirement Board. However, the State Treasurer is responsible for the investment of the trust assets, including the establishment of the asset allocation policy. Assets are commingled for investment purposes with those of the Employees' Retirement System of Rhode Island and various other plans and programs.

4. **Type of Plan:** The State Police Retirement Benefits Trust is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a single-employer plan.

5. **Eligibility:** All State police officers, and the Superintendent of State Police, hired on or after July 1, 1987, participate in this plan. Benefits for State police officers hired before July 1, 1987 are being paid by the State from the general assets of the State, on a pay-as-you-go basis. Eligible employees become members at their date of employment.

6. **Salary for Contribution Purposes:** Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes, unused sick and vacation leave, severance pay, and other extraordinary compensation. Members may contribute on up to 400 hours of overtime during their final averaging period to be included in the determination of their benefit. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.

7. **Employee Contributions:** State police officers contribute 8.75% of their salary per year. The State "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).

8. **Employer Contributions:** The State contributes an actuarially determined percentage of the member's annual salary. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.

9. **Service:** Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.

10. **Final Salary (Salary for Benefit Purposes):** Final Salary includes base pay, longevity increases, up to 400 hours of overtime pay, holiday pay and the member's clothing allowance. For members who work more than 25 years, their Final Salary shall not be more than the Final Salary in the 25th year.

11. Final Average Compensation (FAC): For members eligible to retire after June 30, 2012, their FAC will be based on the average of the highest five consecutive years of compensation, which includes base pay, longevity, up to 400 hours of overtime pay and holiday pay.

12. Retirement:

a. Eligibility:

   i. Members other than Superintendent of State Police can retire on or after the attainment of a 50% benefit multiplier.

   ii. The Superintendent of State Police may retire on or after age 60 if he has credit for 10 years of service.

b. Monthly Benefit:

   i. For members hired before June 30, 2007:

      1. For members eligible to retire as of June 30, 2012, their benefit multiplier will be two and one half percent (2.5%) for a member's first twenty (20) total years, plus three percent (3%) for years after 20. Their monthly benefit will be Final Salary times the benefit multiplier divided by 12.

      2. For members who become eligible to retire after July 1, 2012, their benefit multiplier will be two and one half percent (2.5%) for a member's years of service prior to July 1, 2012, plus two percent (2%) for years thereafter. Their monthly benefit will be FAC times the benefit multiplier divided by 12.

   ii. For members hired after June 30, 2007: Their benefit multiplier is two percent (2.0%) for all years of service. Their monthly benefit will be FAC times the benefit multiplier divided by 12.

   iii. The Superintendent of State Police receives a minimum benefit of 50% of FAC. The member also earns an additional 3% of FAC for each year of service in excess of 25.

   iv. In no event shall a member's original retirement allowance exceed sixty-five percent (65%) of FAC.

   v. Benefits accrued as of June 30, 2012 are protected.

c. Payment Form: Benefits are paid as a monthly life annuity. There are no optional forms of payment available.

d. Death benefit: After the death of a retired member, if the member was married, a benefit will be paid to the spouse equal to 2.00% of the member’s Final Salary for each year of service. There is a minimum benefit of 25% of Final Salary. Benefits are increased one-third for each dependent child. The maximum benefit is 50% of Final Salary. Benefits may not begin before the spouse is age 40, and benefits stop upon the spouse’s death or remarriage. Effective July 1, 2012, death benefits will be based on FAC, and not Final Salary.

13. Disability Retirement:

a. Eligibility: A member is eligible if the disability is work-related. (Non work-related disabilities result in a refund.)

b. Occupational Disability Benefit: 75% of Final Salary.

c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity. The same provisions that apply upon the death of a retired member apply upon the death of a disabled member.

14. Refunds:

a. Eligibility: All members leaving covered employment prior to eligibility for other benefits.

b. Benefit: A lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active Members:

a. Eligibility: Death must have occurred from a service-related cause, or the member must have 10 or more years of service.

b. Ordinary Benefit: After the death of an active member, if the member was married, a benefit will be paid to the spouse equal to 2.00% of the member's Final Salary for each year of service. There is a minimum benefit of 25% of Final Salary. Benefits are increased one-third for each dependent child. The maximum benefit is 50% of Final Salary. Benefits may not begin before the spouse is age 40 without a dependent child, and benefits stop upon the spouse's death or remarriage. Effective July 1, 2012, death benefits will be based on FAC, and not Final Salary.

c. Duty-related Death Benefit: 75% of Final Salary, paid to the spouse or other dependent relative. Benefits cease when the spouse or other relatives die or are no longer dependent.

16. Post-retirement Benefit Increase:

a. The first COLA will be granted at the later of age 55 and the member's third anniversary of retirement for retirees as of June 30, 2012 and the later of SSNRA and the member's third anniversary of retirement for all other current and future retirees.

b. Effective July 1, 2012, the following provisions will apply to all members:

   i. The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.

   ii. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%

   iii. The COLA will be limited to the first $25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first $30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of $25,000 for 2013, $25,000 for 2014, $25,168 for 2015, $25,855 for 2016, $26,098 for 2017, and $26,291 for 2018.

c. In addition to the increases described in section (b) above, there will be a one-time 2% COLA paid in FY2016 on the first $25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of $500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.

TSB

Summary of Benefit Provisions

1. **Plan:** The Teachers' Survivors Benefit Plan (TSB) is a qualified governmental plan designed to provide death benefits in the form of a monthly annuity to survivors of covered employees and retirees.

2. **Authority:** Benefits under the TSB are established by the Rhode Island General Laws, Sections 16-16-25 through 16-16-38.

3. **Administration:** The TSB is administered by the Retirement Board for the Employees' Retirement System of Rhode Island (ERSRI). However, the State investment commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.

4. **Trust Fund:** All contributions are credited to the Teachers' Survivors Benefits Fund, and all benefit payments and refunds are paid from this fund. The fund is commingled with ERSRI for investment purposes.

5. **Plan Year:** A twelve-month period ending June 30.

6. **Coverage and Eligibility:** The TSB covers Rhode Island teachers who are (i) covered by the Employees' Retirement System of Rhode Island (ERSRI) but (ii) are not covered under Social Security. State employees, school support personnel, and teachers whose employment is covered by Social Security may not participate. Participation is mandatory for eligible teachers, and all teachers covered by the plan must make contributions. Survivors are eligible for benefits if the member has made contributions for at least six months prior to death or retirement. A covered teacher remains covered after retirement unless the teacher withdraws his or her contributions.

7. **Districts Covered:** The following school districts are not covered under Social Security, so all of their teachers participate in this plan:

Barrington	Johnston
Bristol/Warren Regional	Lincoln
Burrillville	Little Compton
Central Falls Collaborative	Middletown
Coventry	Newport
Cranston	North Smithfield
Cumberland	Northern RI Collaborative
East Greenwich	Portsmouth
East Providence	Scituate
Foster	Smithfield
Foster-Glocester	Tiverton
Glocester	Westerly

In addition, there are a number of active teachers who teach for districts that are now covered by Social Security, but at one time were not covered. When the district elected to be covered by Social Security, some teachers opted to remain outside that system. These teachers continue to participate in the TSB.

8. **Contributions:** An annual contribution of 2% of salary, up to $192 per year, is required. This contribution is divided equally between members and their employers. I.e., members contribute 1.00% of salary, up to $96 per year.

9. **Salary:** For TSB, the salary used for contribution purposes and to determine the amount of the survivor benefit is the same salary used for ERSRI.

10. **Benefit Schedule:** Benefits are paid as a monthly annuity to survivors upon the death of a covered active teacher or a covered retiree. To determine the benefit payable in any situation, the basic monthly spouse's benefit must first be determined. The basic monthly spouse's benefit is a function of the member's highest annual salary, as shown in the following schedule:

Highest Annual Salary	Basic Monthly Spouse's Benefit
$17,000 or less	$ 750
$17,001 - $25,000	$ 875
$25,001 - $33,000	$ 1,000
$33,001 - $40,000	$ 1,125
More than $40,000	$ 1,250

If the member is retired at the time of death, the salary used is the highest annual salary that the member earned while teaching.

11. **Spouse's benefit:** If a covered, married, active or retired member dies, the spouse is entitled to receive the basic monthly spouse's benefit. If there are other survivors entitled to benefits, as described below, this benefit may be increased. The benefit paid to the spouse may not begin prior to age 60, unless family benefits are payable. Benefits to the spouse cease if the spouse remarries.

12. **Family Benefit:** If at the time of the member's death, the member is married and there are one or more eligible children, then a monthly benefit is payable to the spouse, even if younger than age 60. An eligible child is one under age 18, or under age 23 if a full-time student, or any age, if disabled prior to age 18. The family benefit is a multiple of the basic monthly spouse's benefit. If there is only one eligible child, then the multiple is 150%. If there are two or more eligible children, the multiple is 175%. The benefit continues as long as the spouse is alive and there is at least one eligible child. If the spouse remarries, benefits cease, although children's benefits will be due if there are still eligible children. If family benefits cease because there are no children who remain eligible, spouse's benefits will be paid when the spouse reaches age 60, if he or she has not remarried.

13. **Children's Benefits:** If a covered member dies, and there is no eligible spouse but there are one or more eligible children, then a child's benefit is payable. The amount payable by the plan is a multiple

of the basic monthly spouse's benefit: 75% if there is only one eligible child, 150% if there are two eligible children, and 175% if there are three or more eligible children. Benefits cease when there are no children eligible.

14. **Dependent Parent's Benefits:** If a member dies with no surviving spouse and no eligible children, but the member has a dependent parent, a benefit equal to the basic monthly spouse's benefit is paid to the dependent parent for life. For this purpose, a dependent parent is one who:

    a. Is at least 60 years of age,

    b. Was dependent on the member for at least half his or her support,

    c. Has not remarried since the member's death, and

    d. Is not entitled to Social Security benefit from his or her own earnings equal to or greater the TSB benefit

15. **Summary of benefits:** The following table summarizes the benefit multiples that apply in the different family situations:

Recipients	Multiple of Basic Spouse's Benefit
Spouse alone	100%
Spouse and 1 Child	150%
Spouse and 2 or More Children	175%
One Child Alone	75%
Two Children Alone	150%
Three or More Children Alone	175%
Dependent Parent	100%

16. **Refunds:** If, prior to retirement, a member terminates service in ERSRI or ceases to be covered under TSB for any other reason, a refund equal to the sum of the member's TSB contributions will be paid to him or her. No interest is credited on these contributions.

    If a covered, active teacher dies without an eligible spouse, eligible child or dependent parent, the accumulated member contribution balance, with interest credited at 5.00%, is refunded to the member's beneficiary or estate.

    At the time a member retires, the member must choose whether or not to remain covered under the TSB during retirement. If the member chooses not to remain covered, then a refund of the member's contributions, accumulated with interest at 5.00%, is paid to the member. If the member chooses to remain covered, no action is necessary. Retired members who do not elect a refund at the time of retirement may not later elect a refund.

    If a covered retired teacher dies without an eligible spouse, eligible child or dependent parent, no benefit is payable, and the member's contribution account remains in the fund.

17. **Post-retirement Benefit Increases:** Spouses over age 60 receive a cost-of-living adjustment (COLA), each year, in January. The COLA is expressed as a percentage increase in the benefit, equal to the percentage cost-of-living increase provided to Social Security recipients. This increase is a function of increases in the Consumer Price Index. No COLA is paid on children's or family benefits.

JRBT

Summary of Benefit Provisions

1. **Effective Date and Authority:** The Judicial Retirement Benefits Trust (JRBT) became effective on January 1, 1990 for judges hired on or after that date. Benefits are described in Rhode Island General Laws, Title 8, Chapters 3, 8, and 16, Title 28, Chapter 30, and Title 31, Chapter 43.

2. **Plan Year:** A twelve-month period ending June 30th.

3. **Administration:** The Judicial Retirement Benefits Trust is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy. Assets are commingled for investment purposes with those of the Employees' Retirement System of Rhode Island and various other plans and programs.

4. **Type of Plan:** The Judicial Retirement Benefits Trust is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a single-employer plan.

5. **Eligibility:** All judges or justices of the Supreme Court, a superior court, a district court, a family court, an administrative adjudication court or a workers' compensation court participate in this plan if they were hired on or after January 1, 1990. (These are referred to collectively as state judges.) Benefits for state judges hired before January 1, 1990 are being paid by the state from the general assets of the state, on a pay-as-you-go basis. Eligible state judges become members at their date of employment.

6. **Salary:** Contributions are based on the judge's salary. Benefits are based on the judge's salary at the time of retirement.

7. **Employee Contributions:** State judges contribute 8.75% of their salary per year. Effective July 1, 2012, State judges (excluding justices of supreme, superior, family, and district courts) will contribute 12.00% of their salary per year. Active justices of supreme, superior, and family courts as of June 30, 2011 contribute the rate in effect as of June 30, 2012. The State "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).

8. **Employer Contributions:** The State contributes an actuarially determined percentage of the member's annual salary. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.

9. **Final Average Compensation (FAC):**
   a. For judges who became members on or before July 2, 1997, one-twelfth of the judge's annual salary at the time of retirement.

   b. For judges who became members after July 2, 1997 but before July 1, 2009, one-twelfth of the average of the judge's highest three consecutive annual salaries.

   c. For judges who became members on or after July 1, 2009, one-twelfth of the average of the judge's highest five consecutive annual salaries.

   d. Benefits for death while an active member are based on the member's salary at the time of death, regardless of when the judge became a member.

10. Full Retirement:

a. Eligibility: All judges are eligible for unreduced retirement at or after age 65 if the judge has served for 20 years, or at or after age 70 after 15 years of service.

b. Monthly Benefit:

   i. Judges who were appointed prior to January 1, 2009 receive 100% of FAC at retirement.

   ii. Judges who were appointed on or after January 1, 2009 but prior to July 1, 2009 receive 90% of FAC at retirement, and take an additional 10% reduction to 80% of FAC at retirement if they wish to elect the spouse's death benefit.

   iii. Judges who were appointed on or after July 1, 2009 receive 80% of FAC at retirement, or 70% of FAC at retirement if they wish to elect the spouse's death benefit.

c. Payment Form: Benefits are paid as a monthly life annuity. Members appointed prior to January 1, 2009 automatically receive the spouse's death benefit described below. Members appointed on or after January 1, 2009 must elect to a reduced benefit as described above if they wish to receive the spouse's death benefit. There are no other optional forms of payment available.

d. Death Benefit: After the death of a retired member, if the member was married, 50% of the retiree's benefit is paid to the surviving spouse for life (or until remarriage) if spouse's death benefit is elected. (No election or benefit reduction is required for members appointed prior to January 1, 2009.)

11. Reduced Retirement:

a. Eligibility: A judge is eligible for a reduced retirement benefit at age 65 if the judge has served for 10 years, or at any age after 20 years of service.

b. Reduced Retirement Benefit:

   i. For judges who were appointed prior to January 1, 2009: 75% of FAC at retirement.

   ii. For judges who were appointed on or after January 1, 2009 but prior to July 1, 2009: receive 70% of FAC at retirement, or take an additional 10% reduction to 60% of FAC at retirement if they wish to elect the spouse's death benefit.

   iii. For judges who were appointed on or after July 1, 2009: receive 65% of FAC at retirement, or 55% of FAC at retirement if they wish to elect the spouse's death benefit.

c. Payment Form: Same as for Full Retirement.

d. Death Benefit: Same as for Full Retirement.

12. Refunds:

a. Eligibility: All judges leaving covered employment for a reason other than death or retirement.

b. Benefit: A lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

13. Death Benefit of Active Members:

After the death of an active member, if the member was married, a benefit will be paid to the spouse until his/her death or remarriage. The benefit is equal to 25% of the judge's salary at death if the member had less than seven years of service. If the judge had at least seven but less than 15 years of service, the benefit is equal to 1/3 of the judge's salary at death. If the judge had at least 15 years of service or if the judge was eligible for retirement, the spouse receives 50% of the judge's salary at death. Benefits are payable until the spouse's death or remarriage. Benefits may be paid to any minor children after the death of the spouse. If an active member dies without having a spouse or minor children, a refund is paid to the member's beneficiary.

14. Post-retirement Benefit Increase:

a. For members who retired or will be eligible for retirement as of June 12, 2010: members receive an increase equal to 3.00% of the original benefit each year, beginning in January of the year in which the member reaches the third anniversary of retirement. The increase applies to both retirement and death benefits. This increase is not tied in any way to actual increases in the cost of living. (Judges of the administrative adjudication and workers compensation courts receive a compound 3.00% increase, rather than a simple 3.00% increase.)

b. For members who are or were formally justices of supreme, superior, family, and district courts and were not retired or were not eligible to retire as of June 12, 2010: The member will receive the first COLA upon the later of their third anniversary of retirement or when the member reaches age 65. The annual increase in the member's benefit will be equal to the lesser of their original benefit and the COLA limit in effect in the year the member retires, multiplied by the percentage increase in CPI up to a maximum of 3.0% per year. The COLA will be provided on a simple basis. The applicable annual COLA limit will be $35,000 in 2010, and increase annually by the percentage increase in the Consumer Price Index (CPI) up to a maximum of 3.0% per year. No COLA would be paid on any part of the annual benefit in excess of this limit. The annual increase in the COLA limit will be determined on a compound basis.

c. For members who are or were formally judges of the administrative adjudication court, traffic tribunal, and workers' compensation court and were not retired or were not eligible to retire as of June 12, 2010: The member will receive the first COLA upon the later of their third anniversary of retirement or when the member reaches age 65. The annual increase in the member's benefit will be equal to the lesser of the current benefit and the current COLA limit, multiplied by the percentage increase in CPI up to a maximum of 3.0% per year. The COLA will be provided on a compound basis. The applicable annual COLA limit will initially be $35,000, and increase annually by the percentage increase in the Consumer Price Index (CPI) up to a maximum of 3.0% per year. No COLA would be paid on any part of the annual benefit in excess of this limit. The annual increase in the COLA limit will be determined on a compound basis.

d. For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA.

e. Effective July 1, 2012, the following provisions will apply to all members:
    i. The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.

    ii. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%.

    iii. The COLA will be limited to the first $25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first $30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of $25,000 for 2013, $25,000 for 2014, $25,168 for 2015, $25,855 for 2016, and $26,098 for 2017.

f. In addition to the scheduled increases described in section (e) above, there will be a one-time 2% COLA paid in FY2016 on the first $25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of $500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.

RIJRFT

Summary of Benefit Provisions

The benefit provisions reflected in the actuarial valuation in effect on June 30, 2016 are the same as those summarized in the JRBT Summary of Benefit Provisions listed in the Actuarial Section of this Report.

The benefit provisions are also the same as those summarized in the Board adopted June 30, 2016 actuarial valuation of the JRBT.

ERS
SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

1. First, the actuarial present value of future benefits is determined by discounting the projected benefits for each member back to the valuation date using the assumed investment return rate as the discount rate. For active members, the projected benefits are based on the member’s age, service, gender and compensation, and based on the actuarial assumptions. The calculations take into account the probability of the member's death, disability, or termination of employment prior to becoming eligible for a retirement benefit, as well as the possibility of the member will remain in service and receive a service retirement benefit. Future salary increases are anticipated. The present value of the expected benefits payable to all active members is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits. Liabilities for future members are not included.

2. The employer contributions required to support the benefits are determined as a level percentage of salary, and consist of a normal contribution and an amortization contribution.

3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. This calculation reflects the plan provisions that apply to each individual member.

4. The employer normal cost rate is equal to (i) the normal cost rate, minus (ii) the member contribution rate.

5. The actuarial accrued liability is equal to the present value of all benefits less the present value of future normal costs. The present value of the supplemental member contributions for members with 20 years of service as of June 30, 2012 is

also subtracted. The unfunded actuarial accrued liability (UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

   (a) The UAAL was initially being amortized over the remainder of a closed 30-year period from June 30, 1999. In conjunction with The Rhode Island Retirement Security Act of 2011, the amortization period was reset to 25 years as of June 30, 2010 for the UAAL that existed at that time. In addition, in conjunction with the Article 21 legislation, the amortization period for the local portion of the UAAL of the Teacher's Plan existing as of June 30, 2014 was reset to 25 years from June 30, 2014. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

III. <u>Actuarial Value of Assets</u>

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

IV. <u>Actuarial Assumptions</u>

A. <u>Economic Assumptions</u>

1. Investment return: 7.50% per year, compounded annually, composed of an assumed 2.75% inflation rate and a 4.75% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

2. Overall Wage Inflation: 3.50% per year composed of an assumed 2.75% inflation assumption rate and a 0.75% general productivity component. This assumption represents wage inflation for the economy as a whole and is used a starting point for determining other wage related assumptions and is used as the rate of growth for new entrant salaries in any open group projections.

3. Salary increase rate: The sum of (i) a 3.50% wage inflation assumption (composed of a 2.75% price inflation assumption and a 0.75% additional general increase), and (ii) a service-related component as shown below:

Salary Increase Rates				
	State Employees		Teachers	
Service	Service-Related Component	Total Increase	Service-Related Component	Total Increase
(1)	(2)	(3)	(4)	(5)
1	3.00%	6.50%	10.00%	13.50%
2	3.00%	6.50%	9.00%	12.50%
3	2.75%	6.25%	6.25%	9.75%
4	2.75%	6.25%	5.50%	9.00%
5	2.75%	6.25%	5.00%	8.50%
6	2.75%	6.25%	5.00%	8.50%
7	1.25%	4.75%	4.50%	8.00%
8	1.00%	4.50%	4.25%	7.75%
9	1.00%	4.50%	4.00%	7.50%
10	1.00%	4.50%	4.00%	7.50%
11	1.00%	4.50%	0.00%	3.50%
12	2.25%	5.75%	0.00%	3.50%
13	1.00%	4.50%	0.00%	3.50%
14	1.00%	4.50%	0.00%	3.50%
15	1.00%	4.50%	0.00%	3.50%
16	1.00%	4.50%	0.00%	3.50%
17	0.75%	4.25%	0.00%	3.50%
18	0.75%	4.25%	0.00%	3.50%
19	0.50%	4.00%	0.00%	3.50%
20	0.50%	4.00%	0.00%	3.50%
21	0.50%	4.00%	0.00%	3.50%
22	0.25%	3.75%	0.00%	3.50%
23 or more	0.00%	3.50%	0.00%	3.50%

Salary increases are assumed to occur once a year, on July 1. Therefore, the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

4. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.25% for State Employees and 3.00% for Teachers per year. This increase rate is solely due to the effect of wage inflation on salaries and the demographics of the current population, with no allowance for future membership growth.

5. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.2%, per annum, while the plan has a funding level that exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first such COLA will be applicable in Calendar Year 2017. As of June 30, 2016, it is assumed that the COLAs will be suspended for 11 years due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.5% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

B. <u>Demographic Assumptions</u>

1. Post-termination mortality rates (non-disabled)
   a. Male state employees: 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.

   b. Female state employees: 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.

   c. Male teachers: 97% of rates in a GRS table based on male teacher experience, projected with Scale AA from 2000.

   d. Female teachers: 92% of rates in a GRS table based on female teacher experience, projected with Scale AA from 2000.

The following table provides the life expectancy for individuals retiring in future years based on the assumption with full generational projection:

Life Expectancy for an Age 65 Retiree in Years					
Group	Year of Retirement				
	2010	2015	2020	2025	2030
State Employee - Male	18.8	19.2	19.6	19.9	20.3
State Employee - Female	22.1	22.3	22.5	22.7	23.0
Teacher – Male	21.4	21.7	22.1	22.4	22.7
Teacher – Female	24.2	24.5	24.8	25.0	25.3

2. Post-retirement mortality (disabled lives): One set of rates is used for both state employees and teachers
   a. Males: 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits

   b. Females: 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

   Sample rates are shown below:

Number of Deaths per 100		
Age	Males	Females
25	2.90	1.58
30	2.17	1.42
35	1.67	1.28
40	1.69	1.25
45	1.93	1.34
50	2.30	1.54
55	2.89	1.77
60	3.62	1.99
65	4.07	2.22
70	4.43	2.47
75	5.05	2.95
80	6.77	4.48

3. Pre-retirement mortality: Use the RP-2000 Combined tables with white-collar adjustment for males and females as the base table, and then to apply a 75% for state employees and a 50% multiplier for teachers. Sample rates are shown below:

Number of Deaths per 100				
	State Employees		Teachers	
Age	Males	Females	Males	Females
25	0.03	0.02	0.02	0.01
30	0.03	0.02	0.02	0.01
35	0.04	0.03	0.03	0.02
40	0.07	0.05	0.04	0.03
45	0.10	0.08	0.07	0.05
50	0.15	0.12	0.10	0.08
55	0.25	0.19	0.17	0.13
60	0.42	0.35	0.28	0.23
65	0.83	0.65	0.55	0.43
70	1.45	1.14	0.96	0.76

4. Disability rates: Sample rates are shown below. Ordinary disability rates are not applied to members eligible for retirement. One half the accidental disabilities are assumed to be totally and permanently disabled from any occupation.

	Number of Disabilities per 1,000							
Age	State Ordinary Males	State Accidental Males	State Ordinary Females	State Accidental Females	Teachers Ordinary Males	Teachers Accidental Males	Teachers Ordinary Females	Teachers Accidental Females
25	0.32	0.18	0.45	0.14	0.27	0.04	0.23	0.04
30	0.39	0.22	0.55	0.17	0.33	0.04	0.28	0.04
35	0.53	0.30	0.75	0.23	0.45	0.06	0.38	0.06
40	0.77	0.44	1.10	0.33	0.66	0.09	0.55	0.09
45	1.26	0.72	1.80	0.54	1.08	0.14	0.90	0.14
50	2.14	1.22	3.05	0.92	1.83	0.24	1.53	0.24
55	3.54	2.02	5.05	1.52	3.03	0.40	2.53	0.40
60	4.94	2.82	7.05	2.12	4.23	0.56	3.53	0.56
65	8.09	4.62	11.55	3.47	6.93	0.92	5.78	0.92

5. Termination rates (for causes other than death, disability, or retirement) are a function of the member's gender and service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	State Employees	Teachers
1	0.160000	0.180000
2	0.101160	0.120000
3	0.080768	0.080000
4	0.068839	0.064811
5	0.060375	0.048163
6	0.053810	0.038256
7	0.048446	0.031695
8	0.043911	0.027033
9	0.039983	0.023553
10	0.036518	0.020857
11	0.033418	0.018708
12	0.030614	0.016956
13	0.028054	0.015500
14	0.025699	0.014271
15	0.023519	0.013220
16	0.021489	0.012312
17	0.019590	0.011518
18	0.017807	0.010820
19	0.016125	0.010200
20	0.014535	0.009646
21	0.013026	0.009149
22	0.011590	0.008700
23	0.010222	0.008292
24	0.008914	0.007920
25	0.007662	0.007580

6. Retirement rates (unreduced):

   For State Employees (except Correctional Officers): a flat 25% per year retirement probability for members eligible for unreduced retirement. A 50% retirement probability at first eligibility will be applied if the member has reached age 65 or with at least 25 years of service.

For Teachers: a flat 25% per year retirement probability for members eligible for unreduced retirement. A 60% retirement probability at first eligibility will be applied if the member has reached age 65 or with at least 25 years of service.

For correctional officers: A set of unisex rates, indexed by service, as shown below. All members still active are assumed to retire at age 65 with 10 years of service. Because of the enactment of Article 7 in 2009 and the RIRSA in 2011, the retirement assumption was modified for members whose retirement ages were delayed. Members who would have been assumed to retire prior to under the rules in effect before the enactment of the provision changes are assumed to retire when first eligible for an unreduced benefit. This demand is recognized by adding a 10% probability for every year the member has been deferred.

Corrections	
Service	**Ret. Rate**
20	5.0%
21	5.0%
22	5.0%
23	5.0%
24	5.0%
25	5.0%
26	5.0%
27	5.0%
28	5.0%
29	5.0%
30	13.0%
31	13.0%
32	13.0%
33	20.0%
34	20.0%
35	35.0%
36	25.0%
37	25.0%
38	25.0%
39	25.0%
40	100.0%

For members with 10 or more years of contributory service on June 30, 2012 and that reach their Article 7 Retirement Date within three years of June 30, 2012, 5% are assumed to retire upon first attainment of their Article 7 Retirement Date and receive their benefits accrued as of June 30, 2012.

7. Reduced retirement for Schedule B members (state employees and teachers, males and females). Rates based on the years from Normal Retirement Age, as shown below:

Years from Normal Retirement Age	Ret. Rate
5	2%
4	2%
3	2%
2	3%
1	4%

C. Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): Prior aggregate fiscal year payroll projected forward one year using the overall payroll growth rate.

2. Percent married: 85% of employees are assumed to be married.

3. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

4. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity. The spousal annuity death benefit for vested married participants is valued using a static optional form conversion factor of 0.84 and 0.78 for males and females respectively.

5. For active death benefits, the liability is initially calculated based on the ordinary death benefit provisions, and then a 7.5% load is applied to account for duty related benefits.

6. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.

7. Recovery from disability: None assumed.

8. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.

9. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.

10. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

11. Inactive members: Liabilities for inactive members are approximated as a multiple of their member contribution account balances. For non-vested inactive members, the multiple is 1.0. For vested inactive members, the multiple is 8.0 for members with 25 or more years of service, 3.0 for vested inactive members age 45 or older with less than 25 years of service, and 1.0 for other vested inactive members younger than age 45.

12. Decrement timing: For all non-teachers employees (State Employees, MERS General, and MERS P&F), decrements are assumed to occur at the middle of the year. For Teachers the retirement and termination decrements are assumed to occur at the beginning of the year, while death and disability are assumed to occur at the middle of the year.

13. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

14. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

15. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

16. Benefit Service: All members are assumed to accrue one year of eligibility service each year.

17. All calculations were performed without regard to the compensation limit in IRC Section 401(a)(17) and the benefit limit under IRC Section 415.

D. <u>Participant Data</u>

Participant data was supplied on electronic files. There are separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active members included name, an identification number, gender, a code indicating whether the member was active or inactive, a code indicating employee type (State Employee or Teacher), date of birth, service, salary, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2014, Final Average Compensation as of June 30, 2012, Article 7 Retirement Date, and the Rhode Island Retirement Security Act Retirement Date. For retired members and beneficiaries, the data included name, an identification number, gender, date of birth, date of retirement, amount of benefit, the amount of adjustment after age 62 for anyone electing the Social Security option, a code indicating the option elected and the type of retiree (service retiree, disabled retiree, beneficiary), and if applicable, the joint pensioner's date of birth and gender.

Salary supplied for the current year was based on the earnings for the fiscal year preceding the valuation date. However, for members with less than one year of service, the current rate of salary was used. This salary was adjusted by the salary increase rate for one year.

In defining who was an active member, members with a date of last contribution in the final quarter of the fiscal year were considered active. Otherwise, the member was defined as inactive.

To correct for incomplete and inconsistent data, we first attempted to pulled data from prior valuation files and then made general assumptions to fill in the rest. These modifications had no material impact on the results presented.

TSB
SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

A. Basic Actuarial Assumptions

Except for special assumptions that are specific to the Teachers' Survivors Benefit Plan, described below, the actuarial assumptions used in this valuation are the same as the ones used for Teachers in the June 30, 2016 actuarial valuation of the Employees' Retirement System of Rhode Island (ERSRI). I.e., this valuation uses the same 7.50% investment return rate, the same salary increase rates, the same mortality, disability, and retirement rates used in that valuation.

B. Special TSB Assumptions

1. Family Makeup: The following schedule shows the assumptions about the makeup of the member's family at the time of death:

Family Makeup	Probability
Spouse Only	23%
Spouse and 1 Child	13%
Spouse and 2 or More Children	41%
One Child Alone	2%
Two Children Alone	2%
Three or More Children Alone	1%
Dependent Parent Alone	0%
No Dependents	18%
Total	100%

2. Ages: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses. Parents are assumed to be 30 years older than the member, and children are assumed to be 30 years younger than the member. All children are assumed to remain in school until age 23.

3. Remarriage: It was assumed that no spouses would remarry after the member's death.

4. Refunds at Retirement: It was assumed that 18% of members will elect a refund at retirement. (18% is the proportion of the membership assumed to be without an eligible dependent.)

5. Deferred beneficiaries: No specific data was available for deferred beneficiaries—those spouse's of deceased members who are not yet age 60 and who are not receiving family benefits. They will be entitled to receive a spouse's benefit upon reaching age 60. To estimate this liability, we assumed 10% of current inactive,

nonretired members with contributions still on deposit represented deferred beneficiaries.

6. Inactive members with contributions on deposit: It was assumed that 90% of members who are inactive, nonretired, and non-vested would receive an immediate refund of their TSB contributions. (The other 10% were assumed to be deferred beneficiaries, see item 5.) It was assumed that 90% of members who are inactive, nonretired and vested will leave their contributions on deposit and will receive a deferred ERSRI retirement benefit, with the TSB survivor benefits available at that time.

7. Cost-of-living adjustment (COLA): COLAs are assumed to be 2.75% per year, since that is the ERSRI inflation assumption.

C. Actuarial Methods

1. Valuation date: The TSB plan is valued as of June 30, the last day of the plan's fiscal year. Valuations in the future will be done biennially, in every odd year.

2. Actuarial cost method: The Entry Age Normal actuarial cost method is used to determine the normal cost and actuarial accrued liability. The normal cost is the level dollar amount (not the level percentage of pay used for ERSRI) required to fund a members benefit from entry age to ultimate retirement. The level-dollar version of the Entry Age Normal method was used for consistency with the current contribution requirement of $96.00/year for almost all members.

3. Actuarial asset method: The market value of fund assets is used as the actuarial value, rather than using a smoothed value.

D. Participant Data

Participant data was supplied on electronic files. There were separate files for (i) covered active and inactive, nonretired members, (ii) retirees who had left their contributions on deposit, and (iii) survivors receiving benefits. For active and inactive/nonretired members, we used the same participant data that we used for the valuation of ERSRI, but excluded members not covered under the TSB. For covered retirees, we received a file showing each member's date of birth, sex, TSB contribution account balance (without interest), and final average salary. For beneficiaries receiving benefits, we received a file that included for each deceased member the spouse's (or child's) date of birth, sex, the amount of the monthly benefit, and a code indicating the kind of benefit being paid (e.g., spouse's benefit, family benefit with two or more children, child's benefit, etc.).

MERS

Summary of Assumptions and Methods

I. **Valuation Date**

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. **Actuarial Cost Method**

The actuarial valuation uses the Entry Age actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

The employer normal cost rate is the total normal cost rate, less the member contribution rate. The total normal cost rate is the level percentage-of-pay contribution which would theoretically pay for all benefits if it had been made each year from the inception of the plan and if there had never been any changes of benefits, any changes of assumptions or methods, or any experience gains or losses. The normal costs are determined on an individual basis.

The actuarial accrued liability is the difference between the actuarial present value of all future benefits and the actuarial present value of future normal costs. It is the amount to which the normal costs would have accumulated under the assumptions described in the preceding paragraph. The unfunded actuarial accrued liability (UAAL) is the difference between the actuarial accrued liability and the actuarial value of assets.

The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

For underfunded units, the amortization period is 25 years as measured from June 30, 2010, or 19 years as of the current valuation date for the existing UAAL. In conjunction with the Article 21 legislation, employers were given the option to reset the amortization period for the UAAL existing as of June 30, 2014 to 25 years from June 30, 2014. All new gains and losses each year will be amortized over individual 20 year periods. At any time that a unit is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses. The actuarial value is calculated in the aggregate for all units combined, and then it is allocated to each unit in proportion to that unit's market value.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.50% per year, compounded annually, composed of an assumed 2.75% inflation rate and a 4.75% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

2. Salary increase rate: For general employees, the sum of (i) a 3.50% wage inflation assumption (composed of a 2.75% price inflation assumption and a 0.75% additional general increase), and (ii) a service-related component as shown below:

Police/Fire Employees		
Years of Service	Service-Related Component	Total Increase
1	10.00%	14.00%
2	9.00	13.00
3	7.00	11.00
4	4.00	8.00
5	2.50	6.50
6	3.00	7.00
7	0.50	4.50
8	0.50	4.50
9 or more	0.00	4.00

For police/fire employees, the sum of (i) a 4.00% wage inflation assumption (composed of a 2.75% price inflation assumption and a 1.25% additional general increase), and (ii) a service-related component as shown below:

General Employees		
Years of Service	Service-Related Component	Total Increase
1	4.00%	7.50%
2	3.00	6.50
3	2.75	6.25
4	2.50	6.00
5	2.25	5.75
6	2.00	5.50
7	1.25	4.75
8	0.75	4.25
9-10	0.50	4.00
11-15	0.25	3.75
16 or more	0.00	3.50

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

3. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.25% for MERS General Employees and 3.50% for MERS P&F per year. This increase rate is solely due to the effect of wage inflation on salaries, with no allowance for future membership growth.

4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2%, per annum for all units. The actual COLA will be determined based on the plan's five-year average investment rate of return minus 5.5% and will range from zero to 4.0%. It is known that the COLA for calendar years 2014 and 2015 will be 0.67% and 2.73% respectively, and this has been reflected in the valuation.

B. <u>Demographic Assumptions</u>

1. Post-retirement mortality rates:
   a. Male employees: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.

   b. Female employees: 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.

c. Disabled males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.

d. Disabled females – 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

2. Pre-retirement mortality (combined ordinary and duty):
   a. Male employees: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments.

   b. Female employees: 75% of RP-2000 Combined Healthy for Females with White Collar adjustments.

Sample rates are shown below:

Number of Deaths per 100		
Age	Males	Females
25	0.03	0.02
30	0.03	0.02
35	0.04	0.03
40	0.07	0.05
45	0.10	0.08
50	0.15	0.12
55	0.25	0.19
60	0.42	0.35
65	0.83	0.65
70	1.45	1.14

3. Disability rates: Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for unreduced retirement.

Age	Number of Disabilities per 1,000					
	General Employees, Ordinary, Males	General Employees, Accidental, Males	General Employees, Ordinary, Females	General Employees, Accidental, Females	Police & Fire, Ordinary, Males and Females	Police & Fire, Accidental, Males and Females
25	0.59	0.18	0.27	0.06	0.26	1.70
30	0.72	0.22	0.33	0.08	0.33	2.20
35	0.98	0.30	0.45	0.11	0.44	2.90
40	1.43	0.44	0.66	0.15	0.66	4.40
45	2.34	0.72	1.08	0.25	1.08	7.20
50	3.97	1.22	1.83	0.43	1.82	12.10
55	6.57	2.02	3.03	0.71	1.82	12.10
60	9.17	2.82	4.23	0.99	1.82	12.10
65	15.02	4.62	6.93	1.62	1.82	12.10

4. Termination rates (for causes other than death, disability, or retirement) are a function of the member’s service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	General Employees, Males & Females	Police & Fire, Males & Females
1	0.175000	0.100000
2	0.118774	0.047300
3	0.101396	0.036903
4	0.086148	0.030821
5	0.072887	0.026506
6	0.061471	0.023158
7	0.051757	0.020424
8	0.043604	0.018111
9	0.036868	0.016108
10	0.031408	0.014342
11	0.027082	0.012761
12	0.023746	0.011332
13	0.021259	0.010026
14	0.019479	0.008826
15	0.018263	0.007714
16	0.017470	0.006679
17	0.016956	0.005711
18	0.016579	0.004802
19	0.016198	0.003944
20	0.015669	0.000000
21	0.014851	0.000000
22	0.013602	0.000000
23	0.011778	0.000000
24	0.009239	0.000000
25	0.005841	0.000000

5. Retirement Rates (unreduced):

   For MERS General Employees: a flat 25% per year retirement probability for members eligible for unreduced retirement. A 50% retirement probability at first eligibility will be only applied if they have reached age 65 or with at least 25 years of service.

   For MERS P&F: Unisex, service based rates are used depend on whether the unit had elected the optional 20-year retirement provisions. All members are assumed to retire upon reaching age 65 with at least ten years of service. Because of the enactment of the RIRSA in 2011, the retirement assumption was modified for members not eligible for retirement by July 1, 2012. Members who would have been assumed to retire at an earlier age under the rules in effect before the enactment of the provision changes are assumed to retire when first eligible for an unreduced benefit. This demand is recognized by adding a 10% probability for every year the member has been deferred.

Police and Fire		
Service	Units with the Optional 20-year retirement election	Units without the Optional 20-year retirement election
20	12.0%	
21	10.0%	
22	10.0%	
23	10.0%	
24	12.0%	
25	14.0%	50.0%
26	16.0%	16.0%
27	18.0%	18.0%
28	20.0%	20.0%
29	20.0%	20.0%
30+	35.0%	35.0%

100% of members eligible to retire as of June 30, 2012 are assumed to retire once they reach 35 years of service. All members not eligible to retire as of June 30, 2012 are assumed retire at SSNRA, if eligible.

For members with 10 or more years of contributory service on June 30, 2012 and that reach their original retirement date within three years of June 30, 2012, 5% are assumed to retire upon first attainment of their original retirement date and receive their benefits accrued as of June 30, 2012.

6. Reduced retirement rates: No early retirements are assumed for police and fire. Rates for general employees are based on the years from Retirement Eligibility for unreduced benefits, as shown below:

Years from Normal Retirement Age	Ret. Rate
5	2%
4	2%
3	2%
2	3%
1	4%

C. Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): Prior aggregate fiscal year payroll projected forward one year using the overall payroll growth rate.

2. Percent married: 80% of employees are assumed to be married.

3. For the special post-retirement police and fire survivor benefit, we have assumed 80% of members will have a spouse at the time of retirement and 10% of those members would choose option 1 or option 2.

4. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

5. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity. The spousal annuity death benefit for vested married participants is valued using optional form conversion factors based on a unisex mortality table.

6. For active death benefits, the liability is initially calculated based on the ordinary death benefit provisions, and then a 7.5% load is applied to account for duty related benefits.

7. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.

8. Recovery from disability: None assumed.

9. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.

10. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.

11. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

12. Inactive members: Liabilities for inactive members are approximated as a multiple of their member contribution account balances. For nonvested inactive members, the multiple is 1.0. For vested inactive members, the multiple is 8.0 for members with 25 or more years of service, 3.0 for vested inactive members age 45 or older with less than 25 years of service, and 1.0 for other vested inactive members younger than age 45.

13. Decrement timing: For all members, decrements are assumed to occur at the middle of the year.

14. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

15. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

16. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

17. Benefit Service: All members are assumed to accrue one year of eligibility service each year.

18. All calculations were performed without regard to the compensation limit in IRC Section 401(a)(17) and the benefit limit under IRC Section 415.

V. <u>Participant Data</u>

Participant data was supplied on electronic files. There were separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active members included name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, unit indicator, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2014, Final Average Compensation as of June 30, 2012, and the Rhode Island Retirement Security Act Retirement Date. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Salary supplied for the current year was based on the earnings for the year preceding the valuation date. This salary was adjusted by the salary increase rate for one year. However, for members with less than one year of service, the current rate of salary was used. This salary was adjusted by the salary increase rate for one year.

In defining who was an active member, members with a date of last contribution in the final quarter of the fiscal year were considered active. Otherwise, the member was defined as inactive.

Beneficiary data for police and fire employees was completed, based on the Age Difference stated above, if the information was not originally supplied on the electronic files.

To correct for incomplete and inconsistent data, we first attempted to pull data from prior valuation files and then made general assumptions to complete the rest. These had no material impact on the results presented.

SPRBT

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

1. First, the actuarial present value of future benefits is determined by discounting the projected benefits for each member back to the valuation date using the assumed investment return rate as the discount rate. For active members, the projected benefits are based on the member’s age, service, sex and compensation, and based on the actuarial assumptions. The calculations take into account the probability of the member's death, disability, or termination of employment prior to becoming eligible for a retirement benefit, as well as the possibility of the member will remain in service and receive a service retirement benefit. Future salary increases are anticipated. The present value of the expected benefits payable to all active members is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits. Liabilities for future members are not included.

2. The employer contributions required to support the benefits are determined as a level percentage of salary, and consist of a normal contribution and an amortization contribution.

3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. This calculation reflects the plan provisions that apply to each individual member.

4. The employer normal cost rate is equal to (i) the normal cost rate, minus (ii) the member contribution rate.

5. The actuarial accrued liability is equal to the present value of all benefits less the present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.
    a. The UAAL was initially being amortized over the remainder of a closed 30-year period from June 30, 1999. In conjunction with The Rhode Island Retirement Security Act of 2011, the amortization period was reset to 25 years as of June 30, 2010 for the UAAL that existed at that time. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.50% per year, compounded annually, composed of an assumed 2.75% inflation rate and a 4.75% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

2. Salary increase rate: The sum of (i) a 3.75% wage inflation assumption (composed of a 2.75% price inflation assumption and a 1.00% additional general increase), and (ii) a service-related component as shown below:

Years of Service	Service-Related Component	Total Increase
0	4.25%	8.00%
1	4.00	7.75
2	4.00	7.75
3	8.00	11.75
4	5.00	8.75
5	3.25	7.00
6	1.25	5.00
7	1.25	5.00
8	1.00	4.75
9	1.00	4.75
10-14	0.75	4.50
15-19	0.50	4.25
20-24	0.25	4.00
25&up	0.00	3.75

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period between the valuation date and the first anniversary of the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption.

3. Payroll growth rate: In the amortization of the unfunded frozen liability, payroll is assumed to increase 3.75% per year. This assumption includes no allowance for future membership growth.

4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.2%, per annum, while the plan has a funding level that exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first such COLA will be applicable in Calendar Year 2017. As of June 30, 2016, it is assumed that the COLAs will be suspended for 11 years due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.5% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

B. <u>Demographic Assumptions</u>

1. Post-termination mortality rates
   a. Healthy males – 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.

   b. Healthy females - 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.

c. Disabled males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits

d. Disabled females – 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

2. Pre-retirement mortality: 75% of the RP-2000 Combined tables with white-collar adjustment for males and females. 15% of active member deaths are occupational.
3. Disability rates – Rates are applied, with 75% of disabilities considered work related, and no recoveries assumed once disabled:

Disabilities that are not work-related are assumed to result in a refund. The disability rates for non work-related causes stop once the member is eligible for retirement.

Age	Rate
20	0.12%
25	0.17
30	0.22
35	0.29
40	0.44
45	0.72
50	1.21

4. Termination rates – None

5. Retirement rates – State police are assumed to retire in accordance with the probabilities as shown below. For Employees hired before July 1, 2007 and whose first eligibility to retire is after June 30, 2012, the normal retirement rate in their first year of eligibility is increased by 10% for each year of service greater than 20 at which they first become eligible to retire due to the change in the accrual rate for service credit earned after June 30, 2012. Any member of the State police, other than the superintendent of State police may retire at any time subsequent to the date the member's retirement allowance equals or exceeds 50% of average compensation, provided that a member shall retire upon the first to occur of (i) the date the member's retirement allowance equals 65%; or (ii) the later of the attainment of age 62 or completion of 5 years of service. However, any current member as of June 30, 2012 who has not accrued 50% upon attaining the age of 62 shall retire upon accruing 50%. 100% are assumed to retire at the attainment of a 65% benefit multiplier if still active.

State Police Employed Before July 1, 2007	
Service	Ret. Rate
20	25.0%
21	15.0%
22	10.0%
23	20.0%
24+	30.0%

State Police Employed On or After July 1, 2007	
Service	Ret. Rate
25	35.0%
26	25.0%
27	20.0%
28	30.0%
29+	40.0%

C. <u>Other Assumptions</u>

1. Percent married: 85% of employees are assumed to be married.

2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

3. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.

4. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

5. Overtime: Members eligible for overtime are assumed to work and contribute on 400 hours of overtime during their final averaging period.

V. <u>Participant Data</u>

Participant data was supplied in electronic files for active and retired members. The data for active members included birth date, sex, service, salary and employee contribution account balance. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

JRBT
Summary of Actuarial Methods and Assumptions

I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

1. First, the actuarial present value of future benefits is determined by discounting the projected benefits for each member back to the valuation date using the assumed investment return rate as the discount rate. For active members, the projected benefits are based on the member’s age, service, sex and compensation, and based on the actuarial assumptions. The calculations take into account the probability of the member's death, disability, or termination of employment prior to becoming eligible for a retirement benefit, as well as the possibility of the member will remain in service and receive a service retirement benefit. Future salary increases are anticipated. The present value of the expected benefits payable to all active members is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits. Liabilities for future members are not included.

2. The employer contributions required to support the benefits are determined as a level percentage of salary, and consist of a normal contribution and an amortization contribution.

3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. This calculation reflects the plan provisions that apply to each individual member.

4. The employer normal cost rate is equal to (i) the normal cost rate, minus (ii) the member contribution rate.

5. The actuarial accrued liability is equal to the present value of all benefits less the present value of future normal costs. The unfunded actuarial accrued liability

(UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

   (a) The UAAL was initially being amortized over the remainder of a closed 30-year period from June 30, 1999. In conjunction with The Rhode Island Retirement Security Act of 2011, the amortization period was reset to 25 years as of June 30, 2010 for the UAAL that existed at that time. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

III. <u>Actuarial Value of Assets</u>

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

IV. <u>Actuarial Assumptions</u>

A. <u>Economic Assumptions</u>

1. Investment return: 7.50% per year, compounded annually, composed of an assumed 2.75% inflation rate and a 4.75% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

2. Salary increase rate: Salaries are assumed to increase at the rate of 3.50% per year. Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period between the valuation date and the first anniversary of the

valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption.

3. Payroll growth rate: In the amortization of the unfunded frozen liability, payroll is assumed to increase 3.50% per year. This assumption includes no allowance for future membership growth.

4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.2%, per annum, while the plan has a funding level that exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first such COLA will be applicable in Calendar Year 2017. As of June 30, 2016, it is assumed that the COLAs will be suspended for 11 years due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.5% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

B. Demographic Assumptions

1. Post-termination mortality rates (non-disabled lives)

   a. Healthy males – 115% of RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA from 2000.

   b. Healthy females – 95% of RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA from 2000.

2. Post-termination mortality rates (disabled lives)

   a. Healthy males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.

   b. Healthy females - 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

3. Pre-termination mortality rates – 75% of the RP-2000 Combined tables with white-collar adjustment for males and females

4. Disability rates – None

5. Termination rates – None

6. Retirement rates – 33% of members are assumed to retire when first eligible for a reduced retirement benefit (age 65 with 10 years of service, or any age with 20 years of service). All other members are assumed to retire when eligible for an unreduced retirement benefit (age 65 with 20 years of service, or age 70 with 15 years of service). Judges who have not reached eligibility for a retirement benefit by age 75 are assumed to terminate at age 75 and receive either a reduced retirement benefit, if eligible, or a refund.

C. Other Assumptions

1. Percent married: 85% of employees are assumed to be married.

2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

3. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.

4. All married members appointed after January 1, 2009 will elect the optional spouse's coverage at retirement.
5. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

V. Participant Data

Participant data was supplied in electronic files for active members and retirees. The data for active members included birth date, sex, service, salary and employee contribution account balance. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

RIJRFT

Summary of Actuarial Methods and Assumptions

The assumptions used in the valuation of the RIJRFT, with the exception of the 2.85% discount rate, are the same as those summarized in the JRBT Summary of Actuarial Methods and Assumption listed in the Actuarial Section of this report. The assumptions are also the same as those summarized in the Board adopted June 30, 2016 actuarial valuation of the JRBT.

Solvency Test

	Aggregate Accrued Liabilities for:				Portion of Actuarial Accrued Liabilities Covered by Assets Available for Benefits		
Year End June 30,	Active Member Contributions (1)	Retirees and Beneficiaries (2)	Active Members (Employer Financed Portion) (3)	Actuarial Value of Assets Available for Benefits	(1)	(2)	(3)
State Employees							
2016	$ 546,139,313	$ 2,972,758,380	$ 885,400,955	$ 2,468,446,998	100%	65%	0%
Teachers							
2016	$ 869,811,233	$ 4,734,334,535	$ 862,332,702	$ 3,772,348,051	100%	61%	0%
Teachers' Survivors Benefit Plan							
2016	$ 8,836,898	$ 157,052,544	$ 21,023,733	$ 286,485,057	100%	100%	574%
State Police Retirement Benefit Trust							
2016	$ 14,978,441	$ 59,616,701	$ 60,910,010	$ 123,788,498	100%	100%	81%
Judicial Retirement Benefit Trust							
2016	$ 8,519,694	$ 24,405,717	$ 32,362,116	$ 64,401,616	100%	100%	97%
Rhode Island Judicial Retirement Fund Trust*							
2016	$ 334,265	$ 3,914,017	$ 16,322,895	$ 582,245	100%	6%	0%
Municipal Employees Retirement System Plan - General Employees							
2016	$ 127,744,740	$ 697,200,387	$ 317,373,150	$ 964,595,506	100%	100%	44%
Municipal Employees Retirement System Plan - Police/Fire Employees							
2016	$ 81,825,506	$ 309,878,907	$ 216,362,006	$ 488,505,138	100%	100%	45%

**2.85% Discount Rate*

Note: *Schedule is intended to display information for 10 years. Additional years will be displayed as they become available.*

Schedule of Funding Progress

Year End June 30,		Actuarial Accrued Liabilities		Actuarial Value of Assets	Assets as a % of Accrued Liabilities		Unfunded Actuarial Accrued Liabilities (UAAL)		Covereed Employee Payroll	UAAL as a % of Covered Employee Payroll
State Employees										
2016	$	4,404,298,648	$	2,468,446,998	56.0%	$	1,935,851,650	$	693,242,177	279.2%
2015	$	4,371,789,900	$	2,476,485,327	56.6%	$	1,895,304,573	$	691,555,582	274.1%
2014	$	4,369,081,872	$	2,449,125,421	56.1%	$	1,919,956,451	$	675,204,750	284.4%
2013	$	4,266,053,163	$	2,411,057,214	56.5%	$	1,854,995,949	$	664,118,904	279.3%
2012	$	4,297,261,311	$	2,421,191,542	56.3%	$	1,876,069,769	$	669,477,539	280.2%
2011	$	4,255,362,463	$	2,443,690,798	57.4%	$	1,811,671,665	$	633,146,197	286.1%
2010	$	4,234,409,675	$	2,532,090,798	59.8%	$	1,702,318,877	$	630,246,973	270.1%
2009	$	4,482,244,291	$	2,646,081,020	59.0%	$	1,836,163,271	$	605,872,460	303.1%
2008	$	4,331,504,516	$	2,700,368,568	62.3%	$	1,631,135,948	$	587,500,000	277.6%
2007	$	4,332,888,818	$	2,493,428,522	57.5%	$	1,839,460,296	$	660,044,273	278.7%
Teachers										
2016	$	6,466,478,470	$	3,772,348,051	58.3%	$	2,694,130,419	$	1,009,979,725	266.8%
2015	$	6,438,732,100	$	3,783,601,053	58.8%	$	2,655,131,047	$	995,994,669	266.6%
2014	$	6,424,596,267	$	3,742,152,714	58.2%	$	2,682,443,553	$	982,565,406	273.0%
2013	$	6,265,311,945	$	3,697,787,537	59.0%	$	2,567,524,408	$	963,525,547	266.5%
2012	$	6,373,081,344	$	3,746,299,871	58.8%	$	2,626,781,473	$	971,904,991	270.3%
2011	$	6,325,941,951	$	3,776,407,834	59.7%	$	2,549,534,117	$	1,002,656,294	254.3%
2010	$	6,266,400,444	$	3,873,118,262	61.8%	$	2,393,282,182	$	989,236,951	241.9%
2009	$	6,900,963,108	$	4,008,931,337	58.1%	$	2,892,031,771	$	987,463,633	292.9%
2008	$	6,632,016,708	$	4,044,954,378	61.0%	$	2,587,062,330	$	985,898,174	262.4%
2007	$	6,750,125,236	$	3,737,981,686	55.4%	$	3,012,143,550	$	959,372,837	314.0%
Teachers' Survivors Benefit Plan^										
2016	$	186,913,175	$	286,485,057	153.3%	$	(99,571,882)	$	522,968,886	-19.0%
2014	$	192,124,126	$	293,921,803	153.0%	$	(101,797,677)	$	542,756,917	-19.0%
2013	$	175,233,723	$	261,365,155	149.0%	$	(86,131,432)	$	544,090,898	-16.0%
2011	$	133,569,376	$	242,885,805	182.0%	$	(109,316,429)	$	537,264,193	-20.0%
2009	$	129,110,000	$	186,737,083	145.0%	$	(57,627,083)	$	509,416,780	-11.0%
2007	$	116,599,601	$	259,851,904	223.0%	$	(143,252,303)	$	466,208,437	-31.0%

^*Actuarial valuations are requried, at a minimum, to be performed biennially. Additional years will be displayed as they become available.*

Year End June 30,		Actuarial Accrued Liabilities		Actuarial Value of Assets	Assets as a % of Accrued Liabilities		Unfunded Actuarial Accrued Liabilities (UAAL)		Covereed Employee Payroll	UAAL as a % of Covered Employee Payroll
State Police Retirement Benefit Trust										
2016	$	135,505,152	$	123,788,498	91.4%	$	11,716,654	$	22,555,315	51.9%
2015	$	117,056,727	$	115,585,013	98.7%	$	1,471,714	$	19,940,052	7.4%
2014	$	108,363,537	$	104,781,384	96.7%	$	3,582,153	$	20,814,621	17.2%
2013	$	102,259,438	$	92,916,758	90.9%	$	9,342,680	$	19,904,363	46.9%
2012	$	94,031,687	$	84,293,968	89.6%	$	9,737,719	$	23,669,619	41.1%
2011	$	74,185,705	$	73,151,768	98.6%	$	1,033,937	$	19,711,694	5.2%
2010	$	73,048,680	$	65,760,284	90.0%	$	7,288,396	$	19,715,070	37.0%
2009	$	75,480,005	$	60,232,045	79.8%	$	15,247,960	$	17,096,202	89.2%
2008	$	69,029,513	$	54,927,390	79.6%	$	14,102,123	$	16,698,764	84.5%
2007	$	60,427,947	$	45,996,910	76.1%	$	14,431,037	$	15,836,354	91.1%

Schedule of Funding Progress

Year End June 30,	Actuarial Accrued Liabilities	Actuarial Value of Assets	Assets as a % of Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Covereed Employee Payroll	UAAL as a % of Covered Employee Payroll
Judicial Retirement Benefit Trust						
2016	$ 65,287,527	$ 64,401,616	98.6%	$ 885,911	$ 9,034,080	9.8%
2015	$ 61,963,672	$ 60,004,470	96.8%	$ 1,959,202	$ 9,285,354	21.1%
2014	$ 57,504,663	$ 53,830,516	93.6%	$ 3,674,147	$ 9,309,572	39.5%
2013	$ 54,429,531	$ 47,640,773	87.5%	$ 6,788,758	$ 8,975,536	75.6%
2012	$ 52,085,154	$ 43,428,646	83.4%	$ 8,656,508	$ 8,822,823	98.1%
2011	$ 46,594,407	$ 40,105,919	86.1%	$ 6,488,488	$ 8,474,716	76.6%
2010	$ 46,641,701	$ 38,074,287	81.6%	$ 8,567,414	$ 7,461,120	114.8%
2009	$ 41,738,040	$ 36,839,221	88.3%	$ 4,898,819	$ 6,843,454	71.6%
2008	$ 38,115,602	$ 34,670,394	91.0%	$ 3,445,208	$ 6,601,889	52.2%
2007	$ 35,355,326	$ 29,630,637	83.8%	$ 5,724,689	$ 6,451,666	88.7%
Rhode Island Judicial Retirement Fund Trust^*						
2016	$ 20,571,178	$ 582,245	2.8%	$ 19,988,933	$ 957,007	2088.7%
2013	$ 12,077,841	$ 152,910	1.3%	$ 11,924,931	$ 1,255,256	950.0%
2012	$ 16,387,206	$ -	0.0%	$ 16,387,206	$ 1,230,644	1331.6%

^Actuarial valuations are requried, at a minimum, to be performed biennially. Additional years will be displayed as they become available.
**2.85% Discount Rate*

Year End June 30,	Actuarial Accrued Liabilities	Actuarial Value of Assets	Assets as a % of Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAAL)	Covereed Employee Payroll	UAAL as a % of Covered Employee Payroll
Municipal Employees' Retirement System Plan - General Employees**						
2016	$ 1,142,318,277	$ 964,595,506	84.4%	$ 177,722,771	$ 232,291,647	76.5%
2015	$ 1,111,720,282	$ 945,727,947	85.1%	$ 165,992,335	$ 230,499,170	72.0%
2014	$ 1,071,641,207	$ 911,399,108	85.0%	$ 160,242,099	$ 223,736,632	71.6%
2013	$ 1,051,689,455	$ 875,652,368	83.3%	$ 176,037,087	$ 223,380,413	78.8%
2012	$ 1,023,568,790	$ 859,515,584	84.0%	$ 164,053,206	$ 223,065,778	73.5%
2011	$ 1,005,419,698	$ 846,426,631	84.2%	$ 158,993,067	$ 226,932,538	70.1%
2010	$ 1,138,019,716	$ 851,172,779	74.8%	$ 286,846,937	$ 229,149,276	125.2%
2009	$ 974,562,323	$ 863,942,093	88.6%	$ 110,620,230	$ 230,999,416	47.9%
2008	$ 915,012,135	$ 856,409,161	93.6%	$ 58,602,974	$ 232,008,474	25.3%
2007	$ 865,065,519	$ 784,849,786	90.7%	$ 80,215,733	$ 227,821,351	35.2%
Municipal Employees' Retirement System Plan - Police/Fire Employees**						
2016	$ 608,066,419	$ 488,505,138	80.3%	$ 119,561,281	$ 96,834,672	123.5%
2015	$ 567,219,865	$ 461,702,185	81.4%	$ 105,517,680	$ 93,380,954	113.0%
2014	$ 522,149,230	$ 429,663,343	82.3%	$ 92,485,887	$ 89,936,969	102.8%
2013	$ 501,133,572	$ 399,905,455	79.8%	$ 101,228,117	$ 87,428,024	115.8%
2012	$ 476,905,589	$ 378,659,964	79.4%	$ 98,245,625	$ 83,164,238	118.1%
2011	$ 423,459,603	$ 358,388,192	84.6%	$ 65,071,411	$ 78,461,560	82.9%
2010	$ 488,601,649	$ 345,212,363	70.7%	$ 143,389,286	$ 76,664,402	187.0%
2009	$ 381,090,367	$ 332,424,901	87.2%	$ 48,665,466	$ 75,588,025	64.4%
2008	$ 351,274,694	$ 318,158,043	90.6%	$ 33,116,651	$ 72,943,546	45.4%
2007	$ 314,167,970	$ 279,765,878	89.0%	$ 34,402,092	$ 70,413,220	48.9%

** *Each employer unit participating in MERS is financially responsible for its own plan. Therefore, the aggregate numbers shown on the above schedules reflect only the aggregate condition of MERS and do not indicate the status of any particular employer unit.*

Note: *Data in this schedule prior to fiscal year ending June 30, 2016 was completed by ERSRI and derived from actuarial valuations prepared by GRS and certified by ERSRI Board in prior fiscal years.*

Schedule of Employees Added to and Removed from Rolls

Year End June 30,	Added To Rolls: Number	Added To Rolls: Annual Allowance	Added To Rolls: Average Annual Allowance	Removed From Rolls: Number	Removed From Rolls: Annual Allowance	Removed From Rolls: Average Annual Allowance	Rolls - End oF Year: Number	Rolls - End oF Year: Annual Allowance	Rolls - End oF Year: Average Annual Allowance	% Increase (Decrease) in Average Annual Allowance
State Employees										
2015							11,041	$ 324,950,326	$ 29,431	N/A
2016	613	$ 15,388,026	$ 25,103	596	$ 12,112,805	$ 20,323	11,058	$ 328,225,547	$ 29,682	0.85%
Teachers										
2015							10,902	$ 476,724,067	$ 43,728	
2016	514	$ 15,986,350	$ 31,102	329	$ 10,981,290	$ 33,378	11,087	$ 481,729,127	$ 43,450	-0.64%
Teachers' Survivors Benefit Plan										
2014							537	$ 9,709,131	$ 18,080	
2016	101	$ 498,715	$ 4,938	121	$ 1,948,382	$ 16,102	517	$ 8,259,464	$ 15,976	-5.82%
State Police Retirement Benefit Trust										
2015							39	$ 3,053,869	$ 78,304	
2016	17	$ 1,562,823	$ 91,931	-	$ -	$ -	56	$ 4,616,692	$ 82,441	5.28%
Judicial Retirement Benefit Trust										
2015							16	$ 2,091,000	$ 130,688	
2016	5	$ 702,976	$ 140,595	1	$ 59,888	$ 59,888	20	$ 2,734,088	$ 136,704	4.60%
Rhode Island Judicial Retirement Fund Trust										
2015							-	$ -	$ -	
2016	2	$ 399,016	$ 199,508	-	$ -	$ -	2	$ 399,016	$ 199,508	N/A
Municipal Employees Retirement System Plan - General Employees										
2015							4,440	$ 65,115,669	$ 14,666	
2016	303	$ 4,738,481	$ 15,639	182	$ 2,033,016	$ 11,170	4,561	$ 67,821,134	$ 14,870	1.39%
Municipal Employees Retirement System Plan - Police/Fire Employees										
2015							728	$ 22,901,374	$ 31,458	
2016	109	$ 2,563,207	$ 23,516	64	$ 754,694	$ 11,792	773	$ 24,709,887	$ 31,966	1.62%

Note: *Schedule is intended to display information for 10 years. Additional years will be displayed as they become available.*

Analysis of Financial Experience

Basis	State Employees	Teachers	Teachers' Survivors Benefit Plan	State Police Retirement Benefit Trust	Judicial Retirement Benefit Trust	Rhode Island Judicial Retirement Fund Trust	Municipal Employees Retirement System Plan - General	Municipal Employees Retirement System Plan - Police/Fire
1. UAAL as of June 30, 2015	$ 1,895	$ 2,655	$ (93)	$ 1	$ 2	N/A	$ 166	$ 106
2. Impact of changes, gains and losses								
a. Interest at 7.50% for one year*	139	193	(7)	0	0		11	4
b. Expected amortization payments	(138)	(183)	1	(1)	(1)		(12)	(8)
c. Investment experience (gain)/loss	52	73	22	2	1		15	7
d. Actual COLA (0.74%)	(20)	(35)	N/A	-	-		(2)	(3)
e. Salary (gain)/loss	(11)	(20)	N/A	9	(1)		(2)	13
f. Non-economic liability experience (gain)/loss	19	11	(22)	(0)	(1)		2	1
g. Changes in assumptions/methods	0	0	0	0	0		0	0
h. Changes in plan provisions	0	0	0	0	0		0	0
i. Total	$ 41	$ 39	$ (6)	$ 10	$ (1)	$ -	$ 12	$ 14
3. UAAL as of June 30, 2016	$ 1,936	$ 2,694	$ (100)	$ 12	$ 1	$ 20	$ 178	$ 120

Note: All dollar amounts are shown in millions.
**2.85% Discount Rate used for RIJRFT*

Note: *Schedule is intended to display information for 10 years. Additional years will be displayed as they become available.*

Schedule of Active Member Valuation Data

Year End June 30,	Count of Active Members	Annulized Salary	Average Annual Salary	% Increase (Decrease) in Average Annual Salary	Count of Employers
State Employees					
2016	11,083	$ 670,317,639	$ 60,482	1.5%	N/A
2015	11,194	667,333,687	59,615	3.1%	-
2014	11,301	653,343,732	57,813	0.3%	-
2013	11,280	649,998,544	57,624	4.9%	-
2012	11,166	643,909,132	57,667	4.9%	-
2011	11,233	617,247,186	54,949	1.9%	-
2010	11,122	599,879,497	53,936	3.5%	-
2009	11,023	574,569,170	52,125	1.0%	-
2008	11,970	617,622,521	51,598	3.6%	-
2007	12,572	626,192,680	49,809	4.4%	-
Teachers					
2016	13,206	$ 967,531,930	$ 73,265	0.4%	N/A
2015	13,272	968,080,817	72,942	1.7%	-
2014	13,266	951,892,247	71,754	1.1%	-
2013	13,193	936,234,816	70,965	-1.7%	-
2012	13,212	961,958,877	72,809	0.9%	-
2011	13,381	965,764,287	72,174	4.2%	-
2010	13,530	936,748,851	69,235	1.8%	-
2009	13,689	930,993,404	68,010	2.6%	-
2008	13,999	928,250,193	66,308	4.0%	-
2007	14,146	902,193,640	63,777	6.4%	-
Teachers' Survivors Benefit Plan*					
2016	7,028	$ 522,968,886	$ 74,412	-1.1%	N/A
2014	7,139	542,756,917	76,027	0.1%	-
2013	7,227	544,090,898	75,286	0.5%	-
2011	7,215	537,264,193	74,465	2.4%	-
2009	7,173	509,416,780	71,019	3.4%	-
2007	7,013	466,208,437	66,478	7.7%	-

**Plan is required, at a minimum, to only have biennial valuations. Additional years will be displayed as they become available.*

Year End June 30,	Count of Active Members	Annulized Salary	Average Annual Salary	% Increase (Decrease) in Average Annual Salary	Count of Employers
State Police Retirement Benefit Trust					
2016	246	$ 22,555,315	$ 91,688	9.0%	N/A
2015	237	19,940,052	84,135	1.1%	-
2014	250	20,814,621	83,258	-7.1%	-
2013	222	19,904,363	89,659	-12.5%	-
2012	231	23,669,619	102,466	7.1%	-
2011	206	19,711,694	95,688	2.4%	-
2010	211	19,715,070	93,436	-3.8%	-
2009	176	17,096,202	97,138	3.0%	-
2008	177	16,698,764	94,343	6.6%	-
2007	179	15,836,354	88,471	17.5%	-
Judicial Retirement Benefit Trust					
2016	52	$ 9,034,080	$ 173,732	1.0%	N/A
2015	54	9,285,354	171,951	3.4%	-
2014	56	9,309,572	166,242	0.0%	-
2013	54	8,975,536	166,214	-0.2%	-
2012	53	8,822,823	166,468	6.1%	-
2011	54	8,474,716	156,939	3.1%	-
2010	49	7,461,120	152,268	0.1%	-
2009	45	6,843,454	152,077	-0.9%	-
2008	43	6,601,889	153,532	4.7%	-
2007	44	6,451,666	146,629	4.5%	-

Schedule of Active Member Valuation Data

Year End June 30,	Count of Active Members	Annulized Salary	Average Annual Salary	% Increase (Decrease) in Average Annual Salary	Count of Employers
Rhode Island Judicial Retirement Fund Trust**					
2016	5	$ 957,007	$ 191,401	N/A	N/A
2015	7	$ 1,322,650	$ 188,950	-	-
2014	7	$ 1,276,208	$ 182,315	-	-
2013	7	$ 1,274,247	$ 182,035	-	-

***Plan was established July 1, 2012 additional years will be displayed as they become available.*

Year End June 30,	Count of Active Members	Annulized Salary	Average Annual Salary	% Increase (Decrease) in Average Annual Salary	Count of Employers
Municipal Employees Retirement System Plan - General Employees					
2016	5,882	$ 232,291,647	$ 39,492	0.6%	69
2015	5,869	230,499,170	39,274	2.0%	68
2014	5,813	223,736,632	38,489	1.7%	68
2013	5,901	223,380,413	37,855	2.0%	68
2012	6,012	223,065,778	37,103	1.2%	68
2011	6,192	226,932,538	36,649	2.1%	68
2010	6,383	229,149,276	35,900	1.9%	66
2009	6,554	230,999,416	35,246	3.3%	66
2008	6,797	231,839,725	34,109	4.2%	67
2007	6,963	227,821,351	32,719	4.3%	67
Municipal Employees Retirement System Plan - Police/Fire Employees					
2016	1,491	$ 96,834,672	$ 64,946	2.7%	47
2015	1,476	93,380,954	63,266	2.0%	45
2014	1,450	89,936,969	62,025	3.2%	45
2013	1,455	87,428,024	60,088	1.9%	45
2012	1,410	83,164,238	58,982	4.0%	45
2011	1,384	78,461,560	56,692	1.8%	43
2010	1,376	76,664,402	55,715	3.0%	43
2009	1,398	75,588,025	54,069	2.5%	43
2008	1,383	72,943,546	52,743	2.6%	43
2007	1,370	70,413,220	51,397	6.2%	43

Note: Data in this schedule prior to fiscal year ending June 30, 2016 was completed by ERSRI and derived from actuarial valuations prepared by GRS and certified by ERSRI Board in prior fiscal years.

Statistical Section

Statistical Section Information

Summary of Statistical Section
The objective of the Statistical Section is to provide historical perspective, additional context, and detail to complement and assist those using the information in the financial statements, notes to the financial statements, and required supplementary information to better understand and assess ERSRI's economic condition.

ERSRI is responsible for administering seven defined plans and one defined contribution plan. The major features and benefit provisions of each plan are provided in Note 2 to the Basic Financial Statements contained in this report.

Statistical section information is presented in the following categories:

Financial Trend Information
These schedules present financial trend information to assist the reader in understanding how ERSRI's financial position has changed over time:

- Changes in Fiduciary Net Position
- Employer Contribution Rates

Operational Information
These schedules are intended to provide the reader more contextual information regarding the operations of ERSRI when using the financial statement data:

- Schedule of Benefits and Refunds by Type
- Schedule of Retired Members by Type of Benefit
- Schedule of Average Benefit Payments

Demographic Information
This schedule is intended to provide the reader an enhanced understanding of the ERSRI's environment:

- Top Ten Contributing Employers by Member Count

Sources: Unless otherwise noted, the information in the tables is derived from the annual financial reports for the relevant year.

TABLE 1

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION
LAST TEN FISCAL YEARS
(In Thousands)

ERS	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 91,609,012	$ 90,524,544	$ 64,948,561	$ 64,411,897	$ 63,259,241	$ 149,017,700	$ 146,937,507	$ 143,873,895	$ 145,026,026	$ 150,583,168
Employer contributions	313,845,677	297,637,568	289,837,778	272,245,931	246,166,720	281,923,941	241,143,752	234,304,637	242,701,535	255,576,092
State contribution for teachers	96,542,150	87,997,637	84,943,801	76,700,915	70,703,201	80,385,930	70,286,262	68,542,956	73,600,069	82,455,777
Supplemental employer contributions	445,280	408,209	414,450	583,563	15,690,364	-	-	-	-	-
Interest on service credits purchased	152,432	109,084	241,501	233,769	616,647	612,783	911,405	805,416	2,084,965	2,139,373
Service credit transfers	1,810,490		37,511	12,543	-	-	-	1,899	52,996	-
Net investment income (loss)	654,212,917	(7,911,102)	145,549,349	863,045,946	607,847,067	90,726,999	1,004,339,787	671,653,124	(1,261,526,588)	(393,902,354)
Miscellaneous revenue	43,138	39,003	56,546	78,863	-	-	-	230,208	249,490	244,035
Total Additions	$ 1,158,661,096	$ 468,804,943	$ 586,029,497	$ 1,277,313,427	$ 1,004,283,240	$ 602,667,353	$ 1,463,618,713	$ 1,119,412,135	$ (797,811,507)	$ 97,096,091
Deductions:										
Retirement benefits	$ 819,929,757	$ 818,820,664	$ 800,245,103	$ 801,448,787	$ 804,829,970	$ 789,838,446	$ 761,258,156	$ 739,526,963	$ 700,546,456	$ 623,757,108
Death benefits	2,432,232	2,878,655	3,320,919	2,700,200	2,822,400	2,824,800	2,606,747	2,391,600	2,271,400	2,256,800
Refund of contributions	5,711,781	6,306,239	8,618,199	10,062,956	9,419,071	9,796,997	8,890,203	7,550,207	8,287,514	8,481,348
Administrative and Other	7,133,654	5,722,782	6,071,486	5,671,006	5,778,044	7,040,136	6,840,973	6,459,769	7,082,848	6,957,376
Total Deductions	$ 835,207,424	$ 833,728,340	$ 818,255,707	$ 819,882,949	$ 822,849,485	$ 809,500,379	$ 779,596,079	$ 755,928,539	$ 718,188,218	$ 641,452,632
Net change	323,453,672	(364,923,397)	(232,226,210)	457,430,478	181,433,755	(206,833,026)	684,022,634	363,483,596	(1,515,999,725)	(544,356,541)
Fiduciary net position, beginning of year	5,799,032,677	6,163,956,074	6,396,182,285	5,938,751,807	5,757,318,052	5,964,151,078	5,280,128,444	4,916,644,848	6,432,644,573	6,977,001,114
Net position restricted for benefits	$ 6,122,486,349	$ 5,799,032,677	$ 6,163,956,075	$ 6,396,182,285	$ 5,938,751,807	$ 5,757,318,052	$ 5,964,151,078	$ 5,280,128,444	$ 4,916,644,848	$ 6,432,644,573

TSB	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 589,883	$ 642,276	$ 603,388	$ 609,168	$ 628,553	$ 664,900	$ 617,434	$ 637,451	$ 637,887	$ 653,630
Employer contributions	589,883	642,276	603,388	609,168	628,553	664,900	617,434	637,451	637,887	653,630
Net investment income (loss)	33,277,060	(51,004)	6,951,465	39,657,338	26,705,768	3,792,013	40,926,777	26,432,082	(47,913,061)	(14,713,072)
Miscellaneous revenue	4	-	-	-	-	-	-	18	85	-
Total Additions	$ 34,456,830	$ 1,233,548	$ 8,158,241	$ 40,875,674	$ 27,962,874	$ 5,121,813	$ 42,161,645	$ 27,707,002	$ (46,637,202)	$ (13,405,812)
Deductions:										
Retirement benefits	$ 8,405,649	$ 8,097,067	$ 7,750,955	$ 7,421,004	$ 7,127,856	$ 6,708,490	$ 6,528,540	$ 6,118,256	$ 5,977,315	$ 5,538,391
Refund of contributions	266,523	195,601	241,427	201,986	341,232	369,108	235,943	276,270	653,263	374,533
Administrative and Other	309,283	267,475	276,010	260,585	227,789	294,245	278,769	254,216	268,272	260,032
Total Deductions	$ 8,981,455	$ 8,560,143	$ 8,268,392	$ 7,883,575	$ 7,696,877	$ 7,371,843	$ 7,043,252	$ 6,648,742	$ 6,898,850	$ 6,172,956
Net change	25,475,375	(7,326,595)	(110,151)	32,992,099	20,265,997	(2,250,030)	35,118,393	21,058,260	(53,536,052)	(19,578,768)
Fiduciary net position, beginning of year	286,485,058	293,811,653	293,921,803	260,929,704	240,663,707	242,913,737	207,795,344	186,737,084	240,273,136	259,851,904
Net position restricted for benefits	$ 311,960,433	$ 286,485,058	$ 293,811,652	$ 293,921,803	$ 260,929,704	$ 240,663,707	$ 242,913,737	$ 207,795,344	$ 186,737,084	$ 240,273,136

TABLE 1

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION
LAST TEN FISCAL YEARS
(In Thousands)

MERS	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 17,412,163	$ 16,806,273	$ 11,592,465	$ 11,312,953	$ 11,233,301	$ 23,546,848	$ 23,169,991	$ 24,960,269	$ 23,204,957	$ 23,025,785
Employer contributions	48,542,830	46,597,024	44,576,294	37,897,122	35,553,402	35,998,489	29,469,064	31,269,020	33,514,681	33,415,530
Interest on service credits purchased	44,273	36,443	44,515	69,544	379,124	325,305	238,743	249,480	311,047	304,684
Service credit transfers	5,549,444	-	-	-	593,421	-	-	-	19,391	
Net investment income (loss)	157,202,022	(471,319)	32,626,946	185,631,284	125,322,718	19,022,046	193,948,795	122,500,322	(219,914,553)	(68,069,189)
Miscellaneous revenue	51,557	64,748	15,218	16,530	-	-	-	22,886	23,576	22,594
Total Additions	$ 228,802,289	$ 63,033,169	$ 88,855,438	$ 234,927,433	$ 173,081,966	$ 78,892,688	$ 246,826,593	$ 179,001,977	$ (162,840,901)	$ (11,300,596)
Deductions:										
Retirement benefits	$ 96,075,721	$ 93,966,785	$ 86,995,021	$ 86,388,373	$ 84,724,492	$ 64,630,907	$ 59,950,952	$ 54,861,279	$ 49,620,746	$ 45,386,862
Cost of living adjustments	-	-	678,865	-	-	12,108,932	10,776,705	9,572,932	8,461,678	7,549,599
SRA Plus option	-	-	-	-	-	2,648,508	2,585,012	2,486,632	2,225,661	2,000,306
Death benefits	778,333	603,208	-	763,200	695,200	585,600	729,400	706,200	592,000	547,200
Refund of contributions	1,425,882	1,543,855	1,360,545	2,151,611	2,180,177	2,770,982	2,109,439	1,951,464	1,901,603	1,983,936
Service credit transfer payments	6,620,457	-	-	-	-	-	-	-	-	-
Administrative and Other	1,485,182	1,267,911	1,341,041	1,174,961	1,005,124	1,283,433	1,201,862	1,110,144	1,230,710	1,141,742
Total Deductions	$ 106,385,575	$ 97,381,759	$ 90,375,472	$ 90,478,145	$ 88,604,993	$ 84,028,362	$ 77,353,370	$ 70,688,651	$ 64,032,398	$ 58,609,645
Net change	122,416,714	(34,348,590)	(1,520,034)	144,449,288	84,476,973	(5,135,674)	169,473,223	108,313,326	(226,873,299)	(69,910,241)
Fiduciary net position, beginning of year	1,357,876,323	1,392,224,913	1,393,744,945	1,249,295,657	1,164,818,684	1,169,954,358	1,000,481,135	892,167,809	1,119,041,108	1,188,951,349
Net position restricted for benefits	$ 1,480,293,037	$ 1,357,876,323	$ 1,392,224,911	$ 1,393,744,945	$ 1,249,295,657	$ 1,164,818,684	$ 1,169,954,358	$ 1,000,481,135	$ 892,167,809	$ 1,119,041,108

SPRBT	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 2,061,465	$ 2,034,676	$ 1,731,585	$ 2,033,664	$ 1,706,227	$ 1,699,879	$ 1,361,092	$ 1,218,394	$ 1,122,991	$ 1,050,103
Employer contributions	2,980,219	4,004,656	3,432,359	3,330,889	2,103,209	5,333,298	3,786,553	3,590,615	3,340,746	3,720,281
Interest on service credits purchased	3,635	391	3,368	4,660	5,889	36,452	13,384	267	-	-
Net investment income (loss)	13,694,012	58,549	2,655,869	14,124,238	8,844,873	1,393,461	11,237,050	6,201,903	(10,272,571)	(3,097,423)
Miscellaneous revenue	174	29	325	760	-	-	-	-	-	104
Total Additions	$ 18,739,505	$ 6,098,301	$ 7,823,506	$ 19,494,211	$ 12,660,198	$ 8,463,090	$ 16,398,079	$ 11,011,179	$ (5,808,834)	$ 1,673,065
Deductions:										
Retirement benefits	$ 5,078,677	$ 4,585,258	$ 2,496,511	$ 1,659,383	$ 1,038,157	$ 377,208	$ 299,750	$ 234,504	$ 234,504	$ 187,036
Cost of living adjustment	-	-	-	-	-	28,500	22,500	17,250	12,750	9,000
Refund of contributions	63,301	-	-	107,921	-	-	7,726	-	36,241	17
Administrative and Other	125,445	102,055	99,782	83,318	60,143	63,519	53,799	42,192	44,086	38,362
Total Deductions	$ 5,267,423	$ 4,687,313	$ 2,596,293	$ 1,850,622	$ 1,098,300	$ 469,227	$ 383,775	$ 293,946	$ 327,581	$ 234,415
Net change	13,472,082	1,410,988	5,227,213	17,643,589	11,561,898	7,993,863	16,014,304	10,717,233	(6,136,415)	1,438,650
Fiduciary net position, beginning of year	116,316,582	114,905,593	109,678,381	92,034,792	80,472,894	72,479,031	56,464,727	45,747,494	51,883,909	50,445,259
Net position restricted for benefits	$ 129,788,664	$ 116,316,581	$ 114,905,594	$ 109,678,381	$ 92,034,792	$ 80,472,894	$ 72,479,031	$ 56,464,727	$ 45,747,494	$ 51,883,909

TABLE 1

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION
LAST TEN FISCAL YEARS
(In Thousands)

JRBT	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 1,117,518	$ 1,052,902	$ 1,120,609	$ 1,092,790	$ 1,042,291	$ 808,534	$ 711,151	$ 638,181	$ 617,315	$ 580,508
Employer contributions	2,057,159	2,410,039	2,709,397	2,543,510	1,752,049	1,718,379	1,298,278	1,180,817	1,700,174	2,127,643
Net investment income (loss)	7,107,208	28,787	1,367,527	7,220,591	4,528,408	690,844	6,366,574	3,795,252	(6,506,645)	(1,977,525)
Miscellaneous revenue	-	-	-	-	-	-	-	-		
Total Additions	$ 10,281,885	$ 3,491,728	$ 5,197,533	$ 10,856,891	$ 7,322,748	$ 3,217,757	$ 8,376,003	$ 5,614,250	$ (4,189,156)	$ 730,626
Deductions:										
Retirement benefits	$ 2,740,166	$ 2,530,567	$ 1,800,863	$ 1,631,368	$ 1,503,666	$ 1,294,966	$ 1,143,705	$ 995,605	$ 808,249	$ 450,646
Cost of living adjustment	-		-	-	-	88,203	62,060	39,971		
Death benefits	-	-	8,000	-	-	-	-	12,000	28,073	20,775
Administrative and Other	65,088	52,550	51,039	42,538	32,823	36,534	32,763	28,290	28,443	25,156
Total Deductions	$ 2,805,254	$ 2,583,117	$ 1,859,902	$ 1,673,906	$ 1,536,489	$ 1,419,703	$ 1,238,528	$ 1,075,866	$ 864,765	$ 496,577
Net change	7,476,631	908,611	3,337,631	9,182,985	5,786,259	1,798,054	7,137,475	4,538,384	(5,053,921)	234,049
Fiduciary net position, beginning of year	60,418,484	59,509,873	56,172,242	46,989,257	41,202,998	39,404,944	32,267,469	27,729,085	32,783,006	32,548,957
Net position restricted for benefits	$ 67,895,115	$ 60,418,484	$ 59,509,873	$ 56,172,242	$ 46,989,257	$ 41,202,998	$ 39,404,944	$ 32,267,469	$ 27,729,085	$ 32,783,006

RIJRFT	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 116,667	$ 135,454	$ 158,718	$ 153,145	$ 152,910	$ -	$ -	$ -	$ -	$ -
Employer contributions	332,340	140,141	-	-	-	-	-	-	-	-
Net investment income (loss)	63,669	3,869	9,094	12,045	-	-	-	-	-	-
Total Additions	$ 512,676	$ 279,464	$ 167,812	$ 165,190	$ 152,910	$ -	$ -	$ -	$ -	$ -
Deductions:										
Retirement benefits	$ 399,015	$ 231,175	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Administrative and Other	558	361	237	77	-	-	-	-	-	-
Total Deductions	$ 399,573	$ 231,536	$ 237	$ 77	$ -	$ -	$ -	$ -	$ -	$ -
Net change	113,103	47,928	167,575	165,113	152,910	-	-	-	-	-
Fiduciary net position, beginning of year	533,525	485,597	318,023	152,910	-	-	-	-	-	-
Net position restricted for benefits	$ 646,628	$ 533,525	$ 485,598	$ 318,023	$ 152,910	$ -	$ -	$ -	$ -	$ -

TABLE 1

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION
LAST TEN FISCAL YEARS
(In Thousands)

SPRFT	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions	$ 16,566,076	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Supplemental employer contributions	15,000,000	-	-	-	-	-	-	-	-	-
Net investment income (loss)	1,838,792	-	-	-	-	-	-	-	-	-
Miscellaneous revenue	-	-	-	-	-	-	-	-	-	-
Total Additions	$ 33,404,868	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Deductions:										
Retirement benefits	$ 17,391,853	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Deductions	$ 17,391,853	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net change	16,013,015	-	-	-	-	-	-	-	-	-
Fiduciary net position, beginning of year	-	-	-	-	-	-	-	-	-	-
Net position restricted for benefits	$ 16,013,015	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Defined Contribution Plan	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Additions:										
Member contributions *	$ 89,202,835	$ 83,417,174	$ 101,335,771	$ 98,970,355	$ 92,972,909	$ -	$ -	$ -	$ -	$ -
Employer contributions	27,229,405	26,117,372	28,222,896	27,755,911	26,070,631	-	-	-	-	-
Net investment income (loss)	74,924,355	4,314,212	10,458,458	32,157,857	4,663,091	-	-	-	-	-
Miscellaneous revenue	7,500	6,550	911		-	-	-	-	-	-
Total Additions	$ 191,364,095	$ 113,855,308	$ 140,018,036	$ 158,884,123	$ 123,706,631	$ -	$ -	$ -	$ -	$ -
Deductions:										
Distributions	$ 12,335,802	$ 9,224,425	$ 5,331,383	$ 2,643,923	$ 338,109	$ -	$ -	$ -	$ -	$ -
Administrative and Other	1,141,014	1,160,872	1,298,471	1,257,208	963,548	-	-	-	-	-
Total Deductions	$ 13,476,816	$ 10,385,297	$ 6,629,854	$ 3,901,131	$ 1,301,657	$ -	$ -	$ -	$ -	$ -
Net change	177,887,279	103,470,011	133,388,182	154,982,992	122,404,974	-	-	-	-	-
Fiduciary net position, beginning of year	514,246,160	410,776,149	277,387,966	122,404,974	-	-	-	-	-	-
Net position restricted for benefits	$ 692,133,439	$ 514,246,160	$ 410,776,148	$ 277,387,966	$ 122,404,974	$ -	$ -	$ -	$ -	$ -

* Effective July 1, 2015 members with at least 20 years of service as of June 30, 2012 were no longer required to participate in the Defined Contribution Plan. They participates solely in the Defined Benefit Plan. This was the result of the mediated settlement from the pension reform challenge.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF EMPLOYER CONTRIBUTION RATES
Actuarial Valuation - June 30, 2016

History of Employer Contribution Rates

Valuation Date as of June 30,	Fiscal Year Ending June 30,	Employer Contribution Rate
(1)	(2)	(3)
State Employees		
2016	2019	25.75%
2015	2018	24.87%
2014	2017	25.34% [4]
2013	2016	23.64%
2012	2015	23.33%
2011	2014	23.05%
2010	2013	21.18% [3]
2009	2012	22.98%
2008	2011	20.78%
2007	2010	20.78% [2]
2006	2009	21.64% [1]
Teachers		
2016	2019	23.51%
2015	2018	23.13%
2014	2017	23.13% [4]
2013	2016	23.14%
2012	2015	22.60%
2011	2014	20.68%
2010	2013	19.29% [3]
2009	2012	22.32%
2008	2011	19.01%
2007	2010	19.01% [2]
2006	2009	20.07% [1]

[1] *Restated after adopting the amendment of Article 7.*
[2] *Restated after adopting the amendment of Article 16.*
[3] *Restated after reflecting the Rhode Island Retirement Security Act of 2011.*
[4] *Restated after adopting the amendment of Article 21.*

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF EMPLOYER CONTRIBUTION RATES
Actuarial Valuation - June 30, 2016

Teachers' Survivors Benefit Plan

The calculation for the contributions for TSB are prescribed in Rhode Island General Law §16-16-35. The annual salary limit used in the calculation of the 2% contribution rate due to the Teachers Survivors' Benefit Plan is $11,500; one-half (1/2) of the cost shall be contributed by the member by deductions from his or her salary, and the other half (1/2) shall be contributed and paid by the respective city, town, or school district by which the member is employed.

State Police Retirement Benefit Trust

2016	2019	14.74%
2015	2018	12.22%
2014	2017	12.66% [3]
2013	2016	17.22%
2012	2015	17.24%
2011	2014	14.45%
2010	2013	11.07% [2]
2009	2012	25.39%
2008	2011	24.58%
2007	2010	26.03% [1]
2006	2009	26.03% [1]

[1] *Revised pursuant to Article 22 (2008).*

[2] *Restated after reflecting the Rhode Island Retirement Security Act of 2011.*

[3] *Restated to reflect impact of Article 21.*

Judicial Retirement Benefit Trust

2016	2019	20.28%
2015	2018	21.13%
2014	2017	21.58% [4]
2013	2016	26.80%
2012	2015	28.32%
2011	2014	27.28%
2010	2013	19.69% [3]
2009	2012	18.69%
2008	2011	16.19% [2]
2007	2010	16.19% [2]
2006	2009	24.06% [1]

[1] *Reflects changes in benefit provisions enacted by Article 35.*

[2] *Restated to reflect changes in benefit provisions enacted by Article 16.*

[3] *Restated after reflecting the Rhode Island Retirement Security Act of 2011.*

[4] *Restated after reflecting the impact of Article 21.*

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF EMPLOYER CONTRIBUTION RATES
Actuarial Valuation - June 30, 2016

Rhode Island Judicial Retirement Fund Trust
RIJRFT is a closed plan and the actuarial determined contribution is calculated as a level dollar amount.

Municipal Employees' Retirement System Plan - General Employees*

2016	2019	12.23%
2015	2018	11.91%
2014	2017	12.06%
2013	2016	12.74%
2012	2015	12.63%
2011	2014	11.85%
2010	2013	18.35%
2009	2012	9.59%
2008	2011	7.52%
2007	2010	8.50%
2006	2009	9.27%

Municipal Employees' Retirement System Plan - Police/Fire Employees*

2016	2019	17.20%
2015	2018	15.90%
2014	2017	16.15%
2013	2016	16.89%
2012	2015	17.26%
2011	2014	13.27%
2010	2013	31.91%
2009	2012	17.24%
2008	2011	15.42%
2007	2010	14.85%
2006	2009	15.61%

* Each employer unit participating in MERS is financially responsible for its own plan. Therefore, the aggregate numbers shown on the above schedules reflect only the aggregate condition of MERS and do not indicate the status of any particular employer unit.

Note: Data in this schedule prior to fiscal year ending June 30, 2016 was completed by ERSRI and derived from actuarial valuations prepared by GRS and certified by ERSRI Board in prior fiscal years.

TABLE 3

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF BENEFITS AND REFUNDS BY TYPE
LAST TEN FISCAL YEARS
(In Thousands)

ERS	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Deductions:										
Service Retirement	$ 756,807,010	$ 757,469,257	$ 755,331,153	$ 768,819,629	$ 772,592,699	$ 758,007,433	$ 730,240,340	$ 709,939,114	$ 672,621,823	$ 597,510,860
Survivor Retirement	34,563,403	36,200,420	21,694,578	6,768,753	6,635,029	6,375,087	6,159,078	5,824,848	5,508,938	5,252,944
Disability Retirement	27,648,067	24,211,576	22,262,866	24,860,878	24,574,363	24,398,424	23,770,292	22,657,523	21,316,903	19,903,272
Supplemental Retirement	911,277	939,411	956,506	999,527	1,027,913	1,061,420	1,089,321	1,105,478	1,098,799	1,090,033
Death benefits	2,432,232	2,878,655	3,320,919	2,700,200	2,822,400	2,824,800	2,606,747	2,391,600	2,271,400	2,256,800
Refund of contributions	5,711,781	6,306,239	8,618,199	10,062,956	9,417,426	9,796,997	8,890,203	7,550,207	8,287,514	8,472,316
Total	$ 828,073,769	$ 828,005,558	$ 812,184,221	$ 814,211,943	$ 817,069,830	$ 802,464,161	$ 772,755,981	$ 749,468,770	$ 711,105,377	$ 634,486,225

TSB	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Deductions:										
Survivor Retirement	$ 8,405,649	$ 8,097,067	$ 7,750,955	$ 7,421,004	$ 7,127,822	$ 6,704,572	$ 6,527,665	$ 6,118,256	$ 5,977,308	$ 5,538,391
Refund of contributions	266,523	195,601	241,427	201,986	342,877	369,108	235,943	276,270	653,263	383,565
Total	$ 8,672,172	$ 8,292,668	$ 7,992,382	$ 7,622,990	$ 7,470,699	$ 7,073,680	$ 6,763,608	$ 6,394,526	$ 6,630,571	$ 5,921,956

MERS	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Deductions:										
Service Retirement	$ 81,297,434	$ 80,167,328	$ 76,240,655	$ 77,579,600	$ 76,142,106	$ 70,963,734	$ 65,199,269	$ 59,493,126	$ 53,411,131	$ 48,438,579
Survivor Retirement	4,986,860	5,281,693	3,029,126	739,423	684,165	666,693	649,604	621,853	568,980	543,420
Disability Retirement	9,791,427	8,517,764	7,725,240	8,069,350	7,898,221	7,757,920	7,463,796	6,805,864	6,327,974	5,954,770
Death benefits	778,333	603,208	678,865	763,200	695,200	585,600	729,400	706,200	592,000	547,200
Refund of contributions	1,425,882	1,543,855	1,360,545	2,151,611	2,180,177	2,770,982	2,109,439	1,951,464	1,901,603	1,983,936
Total	$ 98,279,937	$ 96,113,847	$ 89,034,430	$ 89,303,185	$ 87,599,869	$ 82,744,929	$ 76,151,508	$ 69,578,507	$ 62,801,688	$ 57,467,905

SPRBT	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Deductions:										
Service Retirement	$ 4,673,084	$ 4,179,857	$ 2,122,230	$ 1,363,462	$ 821,056	$ 224,733	$ 145,775	$ 79,029	$ 77,529	$ 78,917
Survivor Retirement	114,234	114,196	112,696	112,696	33,876	-	-	-	-	-
Disability Retirement	291,359	291,205	261,585	183,225	183,225	180,975	176,475	172,725	169,725	117,116
Refund of contributions	63,301	-	-	107,921	-	-	7,726	-	36,241	-
Total	$ 5,141,979	$ 4,585,258	$ 2,496,511	$ 1,767,304	$ 1,038,157	$ 405,708	$ 329,976	$ 251,754	$ 283,495	$ 196,033

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF BENEFITS AND REFUNDS BY TYPE
LAST TEN FISCAL YEARS
(In Thousands)

JRBT	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Deductions:										
Service Retirement	$ 2,388,732	$ 2,222,569	$ 1,649,394	$ 1,594,682	$ 1,466,980	$ 1,328,974	$ 1,117,296	$ 949,604	$ 752,609	$ 388,183
Survivor Retirement	351,434	307,998	151,469	36,686	36,686	54,195	88,469	85,972	83,713	83,236
Death benefits			8,000		-	-	-	12,000	-	-
Total	$ 2,740,166	$ 2,530,567	$ 1,808,863	$ 1,631,368	$ 1,503,666	$ 1,383,169	$ 1,205,765	$ 1,047,576	$ 836,322	$ 471,419

RIJRFT	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Deductions:										
Service Retirement	$ 399,015	$ 231,175	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 399,015	$ 233,191	$ 2,015	$ 2,014	$ 2,013	$ 2,012	$ 2,011	$ 2,010	$ 2,009	$ 2,008

SPRFT	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Deductions:										
Service Retirement	$ 14,245,610	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Survivor Retirement	2,092,513	-	-	-	-	-	-	-	-	-
Disability Retirement	1,053,730	-	-	-	-	-	-	-	-	-
Total	$ 17,391,853	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF RETIRED MEMBERS BY TYPE OF PENSION BENEFIT
Actuarial Valuation - June 30, 2016

State Employees

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500	520	48	22		590
$500-$1,000	1,276	137	95		1,508
$1,000-$1,500	1,204	153	142		1,499
$1,500-$2,000	1,145	155	141	5	1,446
$2,000-$2,500	1,047	123	139	54	1,363
$2,500-$3,000	843	79	121	84	1,127
$3,000-$3,500	576	73	91	162	902
$3,500-$4,000	465	67	119	145	796
$4,000-$4,500	330	57	91	100	578
$4,500-$5,000	223	26	52	66	367
$5,000-$5,500	193	20	36	54	303
$5,500-$6,000	122	16	40	30	208
$6,000-$6,500	81	14	26	11	132
$6,500-$7,000	53	8	16	10	87
$7,000-$7,500	36	4	18	2	60
Over $7,500	56	13	19	4	92
Total	**8,170**	**993**	**1,168**	**727**	**11,058**

Teachers

Monthly Amount	Service Retirement	Option One: Joint and	Option Two: Joint and	Service Retirement	Total
Under $500	60	7	1		68
$500-$1,000	225	38	24		287
$1,000-$1,500	397	57	36		490
$1,500-$2,000	458	66	50	1	575
$2,000-$2,500	501	57	72	5	635
$2,500-$3,000	865	54	95	3	1,017
$3,000-$3,500	1,401	80	151	13	1,645
$3,500-$4,000	1,580	106	198	41	1,925
$4,000-$4,500	1,361	70	258	40	1,729
$4,500-$5,000	1,149	26	133	94	1,402
$5,000-$5,500	596	15	57	80	748
$5,500-$6,000	218	5	38	25	286
$6,000-$6,500	93	4	17	17	131
$6,500-$7,000	53	1	3	5	62
$7,000-$7,500	27		3	3	33
Over $7,500	41	2	7	4	54
Total	**9,025**	**588**	**1,143**	**331**	**11,087**

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF RETIRED MEMBERS BY TYPE OF PENSION BENEFIT
Actuarial Valuation - June 30, 2016

Teachers' Survivors Benefit Plan

Life Insurance Benefit	Life Insurance	N/A	N/A	N/A	Total
Under $10,000	2				2
$10,000-$11,000	11				11
$11,000-$12,000	18				18
$12,000-$13,000	19				19
$13,000-$14,000	67				67
$14,000-$15,000	25				25
$15,000-$16,000	160				160
$16,000-$17,000	60				60
$17,000-$18,000	66				66
$18,000-$19,000	22				22
$19,000-$20,000	45				45
Over $20,000	22				22
Total	**517**	**0**	**0**	**0**	**517**

State Police Retirement Benefit Trust

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500					
$500-$1,000					
$1,000-$1,500					
$1,500-$2,000					
$2,000-$2,500					
$2,500-$3,000	1				1
$3,000-$3,500					
$3,500-$4,000	3				3
$4,000-$4,500	2				2
$4,500-$5,000					
$5,000-$5,500	1				1
$5,500-$6,000	9				9
$6,000-$6,500	4				4
$6,500-$7,000	4				4
$7,000-$7,500	7				7
Over $7,500	25				25
Total	**56**	**0**	**0**	**0**	**56**

Judicial Retirement Benefit Trust

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500					
$500-$1,000					
$1,000-$1,500					
$1,500-$2,000					
$2,000-$2,500					
$2,500-$3,000					
$3,000-$3,500	1				1
$3,500-$4,000					
$4,000-$4,500					
$4,500-$5,000					
$5,000-$5,500	2				2
$5,500-$6,000					
$6,000-$6,500					
$6,500-$7,000					
$7,000-$7,500					
Over $7,500	17				17
Total	**20**	**0**	**0**	**0**	**20**

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF RETIRED MEMBERS BY TYPE OF PENSION BENEFIT
Actuarial Valuation - June 30, 2016

Rhode Island Judicial Retirement Fund Trust

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500					
$500-$1,000					
$1,000-$1,500					
$1,500-$2,000					
$2,000-$2,500					
$2,500-$3,000					
$3,000-$3,500					
$3,500-$4,000					
$4,000-$4,500					
$4,500-$5,000					
$5,000-$5,500					
$5,500-$6,000					
$6,000-$6,500					
$6,500-$7,000					
$7,000-$7,500					
Over $7,500	2				2
Total	**2**	**0**	**0**	**0**	**2**

Municipal Employees Retirement System Plan - General Employees

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500	766	82	63		911
$500-$1,000	1,087	197	142		1,426
$1,000-$1,500	632	138	97		867
$1,500-$2,000	387	92	85	1	565
$2,000-$2,500	243	39	66	6	354
$2,500-$3,000	129	26	24	12	191
$3,000-$3,500	53	7	12	24	96
$3,500-$4,000	43	2	5	21	71
$4,000-$4,500	18		5	8	31
$4,500-$5,000	16	6	2	3	27
$5,000-$5,500	7	2	1		10
$5,500-$6,000	2		1	1	4
$6,000-$6,500	4		1		5
$6,500-$7,000					
$7,000-$7,500	1				1
Over $7,500	2				2
Total	**3,390**	**591**	**504**	**76**	**4,561**

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF RETIRED MEMBERS BY TYPE OF PENSION BENEFIT
Actuarial Valuation - June 30, 2016

Municipal Employees Retirement System Plan - Police/Fire Employees

Monthly Amount	Service Retirement Allowance	Option One: Joint and Survivor Full	Option Two: Joint and Survivor Half	Service Retirement Allowance Plus	Total
Under $500	27	1			28
$500-$1,000	60	2			62
$1,000-$1,500	49	5	7		61
$1,500-$2,000	51	2	11		64
$2,000-$2,500	65	8	18		91
$2,500-$3,000	99	13	25		137
$3,000-$3,500	133	9	14		156
$3,500-$4,000	81	2	3		86
$4,000-$4,500	49	3	2		54
$4,500-$5,000	14		1		15
$5,000-$5,500	9	1			10
$5,500-$6,000	7				7
$6,000-$6,500	1				1
$6,500-$7,000					
$7,000-$7,500	1				1
Over $7,500					
Total	**646**	**46**	**81**	**0**	**773**

Service Retirement Allowance - is a life annuity that is calculated based on the member's years of service credit and average salary as a participating employee.

Option 1 - Joint and Survivor Full - is an annuity that is actuarially reduced based on the age difference of the member and the designated beneficiary. The retirement benefit that the member and the beneficiary (upon death of the member) will receive will be equal for the respective lives of eacl recipient.

Option 2 - Joint and Survivor Half - is an annuity that is actuarially reduced based on the age difference of the member and the designated beneficiary. The retirement benefit for the member is reduced based on the actuarial reduction calculation. However, this benefit will be higher than the Joint and Survivor Full option. Upon the death of the member, the designated beneficiary will receive 50% of the member's benefit for the remainder of their life.

Service Retirement Allowance Plus - is a life annuity that is calculated based on the member's years of service credit and average salary as a participating employee. In addition, a supplemental amount will be added to the pension benefit. The supplementary amount is determined based on the member's age at retirement and a percentage of an estimate of the average Social Security payment that a member might receive at the age of 62 (calculated on a national average figure). During the month the member turns 62, the pension benefit amount will be reduced by the full national average amount of Social Security payment that a person might receive at the age of 62 (calculated on a national average figure). Also, the pension benefit will be reduced by the full estimated amount and not by the supplemental amount that the member had been receiving. Estimate of Social Security benefits used by ERSRI to calculate pension benefits are general estimates and are not guaranteed by ERSRI or the Social Security Administration (SSA). This option is not related to a member's participation in Social Security or any programs of the SSA.

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF AVERAGE BENEFIT PAYMENTS - RETIREMENT
Actuarial Valuation - June 30, 2016

State Employees

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 23,953	$ 13,571	$ 12,305	$ 18,111	$ 25,461	$ 36,417	$ 48,071	**$ 29,682**
Average monthly benefit	$ 1,996	$ 1,131	$ 1,025	$ 1,509	$ 2,122	$ 3,035	$ 4,006	**$ 2,474**
Average monthly FAC	$ 2,706	$ 3,333	$ 3,600	$ 3,894	$ 4,432	$ 4,669	$ 5,190	**$ 3,902**
Number of retired members	4,444	144	577	788	1,073	1,947	2,085	**11,058**

Teachers

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 42,077	$ 35,242	$ 20,462	$ 31,820	$ 46,571	$ 55,576	$ 60,025	**$ 43,450**
Average monthly benefit	$ 3,506	$ 2,937	$ 1,705	$ 2,652	$ 3,881	$ 4,631	$ 5,002	**$ 3,621**
Average monthly FAC	$ 3,948	$ 4,794	$ 5,402	$ 5,900	$ 5,821	$ 6,131	$ 6,481	**$ 5,068**
Number of retired members	4,678	450	556	964	2,333	1,816	290	**11,087**

Teachers' Survivors Benefit Plan

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 15,976							**$ 15,976**
Number of retired members	517							**517**

State Police Retirement Benefit Trust

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ -	$ 43,257	$ 74,916	$ 44,774	$ 78,525	$ 96,122	$ -	**$ 82,441**
Average monthly benefit	$ -	$ 3,605	$ 6,243	$ 3,731	$ 6,544	$ 8,010	$ -	**$ 6,870**
Average monthly FAC	$ -	$ 4,084	$ 8,527	$ 12,348	$ 11,321	$ 12,323	$ -	**$ 11,367**
Number of retired members	0	1	3	1	34	17	0	**56**

Judicial Retirement Benefit Trust

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 60,388	$ 64,116	$ 112,069	$ 149,120	$ 166,507	$ 186,050	$ -	**$ 136,704**
Average monthly benefit	$ 5,032	$ 5,343	$ 9,339	$ 12,427	$ 13,876	$ 15,504	$ -	**$ 11,392**
Average monthly FAC	$ -	$ 11,874	$ 11,788	$ 14,249	$ 15,300	$ 20,672	$ -	**$ 14,286**
Number of retired members	1	2	4	5	7	1	0	**20**

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF AVERAGE BENEFIT PAYMENTS - RETIREMENT
Actuarial Valuation - June 30, 2016

Rhode Island Judicial Retirement Fund Trust

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 199,508	$ -	$ -	$ -	$ -	$ -	$ -	**$ 199,508**
Average monthly benefit	$ 16,626	$ -	$ -	$ -	$ -	$ -	$ -	**$ 16,626**
Average monthly FAC	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**
Number of retired members	2	0	0	0	0	0	0	**2**

Municipal Employees Retirement System Plan - General Employees

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 20,745	$ 10,285	$ 7,313	$ 10,701	$ 15,363	$ 16,877	$ 29,953	**$ 14,870**
Average monthly benefit	$ 1,729	$ 857	$ 609	$ 892	$ 1,280	$ 1,406	$ 2,496	**$ 1,239**
Average monthly FAC	$ 2,140	$ 2,508	$ 2,257	$ 2,387	$ 2,659	$ 2,813	$ 3,496	**$ 2,652**
Number of retired members	16	134	1,075	855	857	972	652	**4,561**

Municipal Employees Retirement System Plan - Police/Fire Employees

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 32,136	$ 30,494	$ 29,062	$ 28,096	$ 30,775	$ 31,353	$ 44,006	**$ 31,966**
Average monthly benefit	$ 2,678	$ 2,541	$ 2,422	$ 2,341	$ 2,565	$ 2,613	$ 3,667	**$ 2,664**
Average monthly FAC	$ 4,010	$ 3,754	$ 4,096	$ 4,394	$ 4,606	$ 4,421	$ 4,885	**$ 4,481**
Number of retired members	8	33	56	58	278	263	77	**773**

State Police Hired Before July 1, 1987

	0-5 Yrs.	5-10 Yrs.	10-15 Yrs.	15-20 Yrs.	20-25 Yrs.	25-30 Yrs.	>30 Yrs.	Total
Average annual benefit	$ 64,359	$ -	$ -	$ -	$ -	$ -	$ -	**$ 64,359**
Average monthly benefit	$ 5,363	$ -	$ -	$ -	$ -	$ -	$ -	**$ 5,363**
Average monthly FAC	$ 4,034	$ -	$ -	$ -	$ -	$ -	$ -	**$ 4,034**
Number of retired members	269	0	0	0	0	0	0	**269**

Note: *Schedule is intended to display information for 10 years. Additional years will be displayed as they become available.*

TABLE 6

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF TOP TEN CONTRIBUTING EMPLOYERS BY MEMBER COUNT
CURRENT FISCAL PERIOD AND FISCAL PERIOD ENDED NINE YEARS PRIOR

2016			**2007**		
ERS - Teachers	**Number of Covered Employees**	**Percentage of Total Covered Employees**		**Number of Covered Employees**	**Percentage of Total Covered Employees**
Providence School Department	2,166	16.40%	Providence School Department	2,278	16.10%
Cranston School Department	1,016	7.69%	Warwick School Department	1,164	8.23%
Warwick School Department	939	7.11%	Cranston School Department	1,043	7.37%
Pawtucket School Department	761	5.76%	Pawtucket School Department	821	5.80%
Woonsocket School Department	511	3.87%	Woonsocket School Department	570	4.03%
East Providence School Department	499	3.78%	East Providence School Department	533	3.77%
Coventry School Department	447	3.38%	Coventry School Department	507	3.58%
Cumberland School Department	426	3.23%	Cumberland School Department	417	2.95%
North Kingstown School Department	373	2.82%	South Kingstown School Department	410	2.90%
West Warwick School Department	341	2.58%	North Kingstown School Department	404	2.86%
Remaining employers	5,727	43.37%	Remaining employers	5,999	42.41%
	13,206	100.00%		14,146	100.00%
TSB					
Cranston School Department	1,019	14.50%	Cranston School Department	951	12.77%
East Providence School Department	499	7.10%	Coventry School Department	505	6.78%
Coventry School Department	446	6.35%	East Providence School Department	459	6.16%
Cumberland School Department	426	6.06%	Cumberland School Department	420	5.64%
Johnston School Department	318	4.52%	Lincoln School Department	403	5.41%
Westerly School Department	306	4.35%	Central Falls Collaborative	348	4.67%
Lincoln School Department	301	4.28%	Johnston School Department	340	4.57%
Barrington School Department	296	4.21%	Westerly School Department	332	4.46%
Bristol Warren Regional School District	277	3.94%	Bristol Warren Regional School District	303	4.07%
Central Falls Collaborative	265	3.77%	Barrington School Department	284	3.81%
Remaining employers	2,875	40.91%	Remaining employers	3,101	41.65%
	7,028	100.00%		7,446	100.00%

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
SCHEDULE OF TOP TEN CONTRIBUTING EMPLOYERS BY MEMBER COUNT
CURRENT FISCAL PERIOD AND FISCAL PERIOD ENDED NINE YEARS PRIOR

2016			2007		
MERS	**Number of Covered Employees**	**Percentage of Total Covered Employees**		**Number of Covered Employees**	**Percentage of Total Covered Employees**
General Employees					
City of Cranston	660	11.22%	City of Cranston	879	12.62%
City of Pawtucket	497	8.45%	City of Pawtucket	626	8.99%
City of East Providence	396	6.73%	City of East Providence	482	6.92%
City of Woonsocket	360	6.12%	City of Woonsocket	421	6.05%
Town of North Kingstown	309	5.25%	Town North Kingstown	380	5.46%
Town of South Kingstown	303	5.15%	Town of South Kingstown	378	5.43%
City of Newport	274	4.66%	City of Newport	294	4.22%
Town of Cumberland	233	3.96%	Town of Johnston	291	4.18%
Town of Johnston	221	3.76%	Town of Cumberland	267	3.83%
Town of North Providence	209	3.55%	Town of North Providence	257	3.69%
Remaining employers	2,420	41.14%	Remaining employers	2,688	38.60%
	5,882	100.00%		6,963	100.00%

MERS					
Public Safety Employees					
Cranston Fire Department	158	10.60%	Cranston Fire Department	127	9.27%
Cranston Police Department	141	9.46%	Cranston Police Department	113	8.25%
Woonsocket Fire Department	106	7.11%	Woonsocket Fire Department	110	8.03%
North Providence Fire Department	91	6.10%	North Providence Fire Department	97	7.08%
Woonsocket Police Department	91	6.10%	Woonsocket Police Department	97	7.08%
Johnston Fire Department	67	4.49%	North Kingstown Fire Department	80	5.84%
North Kingstown Fire Department	67	4.49%	South Kingstown Police Department	54	3.94%
Middletown Police & Fire Departments	58	3.89%	North Kingstown Police Department	50	3.65%
South Kingstown Police Department	51	3.42%	East Greenwich Fire Department	41	2.99%
North Kingstown Police Department	43	2.88%	Smithfield Police Department	40	2.92%
Remaining employers	618	41.45%	Remaining employers	561	40.95%
	1,491	100.00%		1,370	100.00%